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OPTICAL AND HYDROGRAPHICAL OBSERVATIONS OFF THE COAST OF PERU D--ETC(U)

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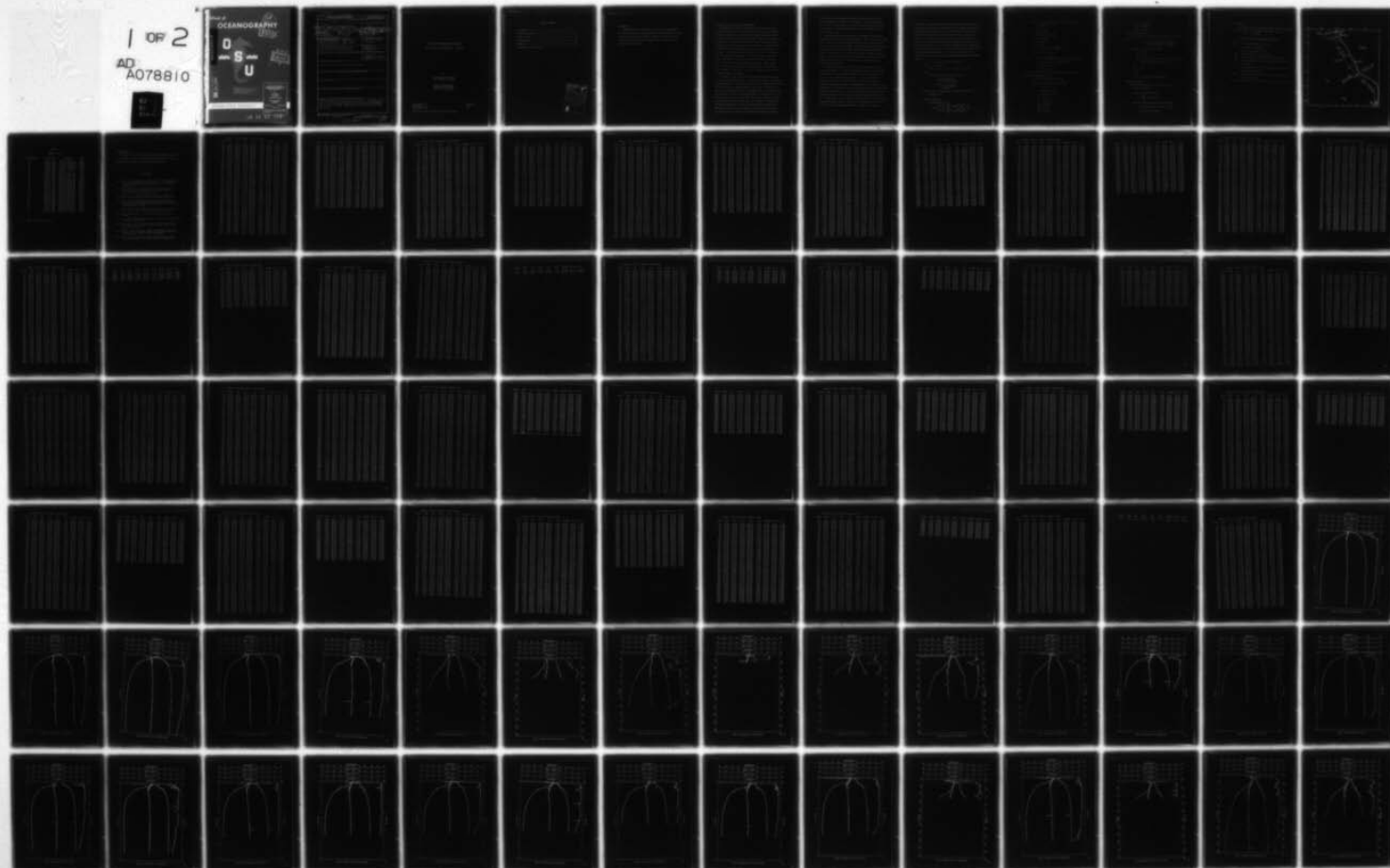
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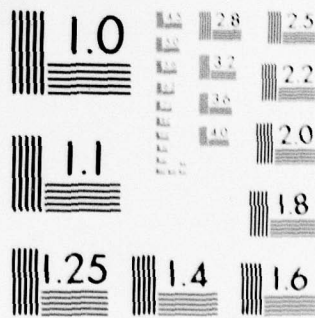
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Optical and Hydrographical  
Observations off the Coast of Peru  
During May-June 1977

by

Heong Pak  
David Manzie  
and  
J. Ronald V. Zaneveld

Office of Naval Research  
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OPTICAL AND HYDROGRAPHICAL OBSERVATIONS  
OFF THE COAST OF PERU DURING MAY - JUNE 1977

by

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Data Report 77  
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September 1979 ✓

Ross Heath  
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## Introduction

During the WELOC-77 cruise, May 21 - June 18, 1977, hydrographic and light beam transmission measurements were simultaneously made in situ off the coast of Peru on R/V WECOMA. Temperature, salinity and light transmission data are listed for standard depths, and their vertical profiles are also presented.



### Hydrographic and Transmissometer Measurements

Measurements of conductivity, temperature and pressure were taken jointly with measurements of light transmission over a 1 meter pathlength. Temperature, conductivity, and pressure measurements were obtained with a CTD designed and built by the OSU optics group. Analog values proportional to temperature, pressure and conductivity are input into a data logging package which records digitized data on cassette tapes. Depth measurements are calculated using a temperature compensated 0-10,000 psia pressure transducer. The resolution for the transducer is 1.67 m. The temperature probe is calibrated for a range of 1.2°C to 31.2°C with a resolution of 0.01°C. The conductivity sensor is temperature compensated, and has a range of 0 to 65  $\mu\text{mho}$  with a resolution of 0.02  $\mu\text{mho}$ . Overall system error is estimated to be within 0.04°C temperature, 0.07 ‰ salinity, and 6.5 m depth. A bottom sensor was used to indicate when the instrument is within 2 meters of the bottom.

The OSU beam transmissometer has a light emitting diode source with a peak output wavelength of 660 nm. The source is pulsed with a synchronous photodiode detector. The detector and source are in a common pressure housing and the light path is folded by means of a porro prism. The output of the LED is also constantly monitored by a photodiode with the same characteristics and electronics circuits as the other photodiode. The output of the instrument is given as the ratio of the light intensity that traverses the water to the directly measured LED intensity. The instrument is calibrated by setting the transmission in air to 87.1% which, due to different reflectivities in air and in water corresponds to 100% transmission in water. The output signal is recorded in the cassette data logger described above.

The electronics and temperature compensation yield transmission results which are consistent to within 0.5% transmission. The collimation angle of the source is approximately  $0.2^\circ$  and the detection angle of the receiver is less than  $0.5^\circ$ . More detailed description of the instrument is found in Bartz et al. (1978).

Depth determinations from the pressure measurements are made using the method as described by the Bissett-Berman Co. (1968). An average latitude of  $8^\circ\text{S}$  is used in the depth calculations which results in errors of less than 1 m at all but the  $23^\circ\text{S}$  stations. Salinity and temperature calculations are made using the equations of Brown (1966) and Bradshaw and Schleicher (1965). Sigma-t values are calculated using Knudsen's (1901) equations as outlined by Sweers (1971). From the calculated sigma-t values, the specific volume anomaly and the dynamic height anomaly are computed using the equations of Sweers (1971).

The percent transmission is the in situ value obtained from the 1 m beam transmissometer. This value must then be corrected for any variations in the index of refraction of the sea water at the lens interfaces due to pressure, salinity and temperature changes. The index of refraction is determined using a regression analysis which produces results nearly identical to those of the method of Leyendekkers (1977). The index-corrected transmission is then further corrected to determine the potential transmission the water sample would have if it were raised to the surface and remove the compression effects which effectively squeeze more water and particles into the 1 m light patch. This is computed using the expression for compressibility as obtained from Hill (1962). The value of the potential beam attenuation coefficient is merely the negative natural logarithm of the potential



transmission. The actual attenuation of light by the particulate matter alone could theoretically be computed by subtracting the beam attenuation coefficient for pure water (at a given temperature and salinity) from the potential beam attenuation coefficient obtained herein. However, the exact beam attenuation coefficient of pure water (and pure seawater) is not known. Some experimentalists (Clarke and James, 1939; Sullivan, 1963) have obtained values of  $c$  for pure water (for light of 650 nm wavelength) which range from 0.288 to 0.351. Values at 660 nm would be slightly higher (roughly between 0.320 and 0.390). In this way, the potential beam attenuation coefficient may be used to determine relative particle concentrations.

#### EQUATIONS USED IN THE CALCULATIONS

Salinity and Temperature:

See Brown (1966) and Bradshaw and Schleicher (1965)

Depth:

From the Bissett-Berman Corporation (1968):

$$D = \frac{972.52p - 0.0021077p^2}{978.05(1 + 0.00529\sin^2\phi)}$$

where  $D$  = actual depth (m)  
 $p$  = pressure (db)  
 $\phi$  = latitude

Sigma-t, specific volume anomaly and dynamic height anomaly:

See Sweers (1971)

Index of refraction:

From Leyendekkers (1977):

$$n^2 = \frac{2 \times 10^{-3} \left\{ A_1 + \frac{A_2}{A_3} \right\} + 2A_4 e^{-A_5 T} \left( \frac{1}{B} \right)^{A_6} + 1.0}{1 \cdot 10^{-3} \left\{ A_1 + \frac{A_2}{A_3} \right\} - A_4 e^{-A_5 T} \left( \frac{1}{B} \right)^{A_6}}$$



where  $n$  = absolute index of refraction of the seawater

$T$  = temperature in  $^{\circ}\text{C}$

$$A_1 = -2.06378$$

$$A_2 = 2.002484$$

$$A_3 = 0.54214 - 0.0021896T$$

$$A_4 = 0.2053814$$

$$A_5 = 6.0017 \times 10^{-5}$$

$$A_6 = 0.887$$

$$B = A_7 \left[ 1 - 0.315 \log \left( \frac{A_8 + A_9 + P}{A_8 + 1.0} \right) \right]$$

where  $p$  = pressure in bars

$$A_7 = \frac{1.000028}{[1 - [(T - 3.9863)^2 (T + 288.9414) / 508929.2 (T + 68.12963)]]}$$

$$A_8 = 2671.8 + 19.454T - 0.2708T^2 + 0.0009798T^3$$

$$A_9 = 6.8966S - 0.0703ST$$

$S$  = salinity in  $\text{‰}$

However, this equation can be simplified and approximated to within 0.1% by using the following expression:

$$n = A_1 \alpha^2 + A_2 T^2 + A_3 S^2 + A_4 \alpha + A_5 S + A_6 T + A_7 P + A_8$$

where  $\alpha$  = specific volume in situ in  $\frac{\text{ml}}{\text{gm}}$

$S$  = salinity in  $\text{‰}$

$T$  = temperature in  $^{\circ}\text{C}$

$P$  = pressure in decibars

$$A_1 = 0.17695$$

$$A_2 = -3.9907 \times 10^{-7}$$

$$A_3 = -4.5527 \times 10^{-8}$$

$$A_4 = -0.58215$$

$$A_5 = -7.6046 \times 10^{-5}$$

$$A_6 = -2.7807 \times 10^{-5}$$

$$A_7 = 4.701 \times 10^{-7}$$

$$A_8 = 1.74067$$

Index-corrected transmission:

Through calculations of the optical setup in the transmittance we have:

$$C = - \ln \left\{ \frac{Tr}{1.012176 \left[ 1 - \left( \frac{n_p - n_w}{n_p + n_w} \right)^2 \right]^2 \left[ 1 - \left( \frac{n_Q - n_w}{n_Q + n_w} \right)^2 \right]^2} \right\}$$

where  $Tr$  = measured transmission in %

$$n_p = 1.517645$$

$$n_Q = 1.45640$$

$n_w$  = index of refraction of water as calculated above

$c$  = beam attenuation coefficient in  $m^{-1}$

then

$$Tr_{corr} = e^{-C}$$

where

$Tr_{corr}$  = index-corrected transmission

Potential transmission:

The potential transmission is calculated as follows:

$$Pot TR = (Tr_{corr})^{1-\mu p}$$

where  $p$  = pressure in decibars

$$\mu = \frac{\alpha_0 - \alpha}{p \alpha_0} \quad \text{from Hill (1962)}$$

where  $\alpha_0$  = specific volume at the surface in  $\frac{ml}{gm}$

$\alpha$  = specific volume at pressure  $p$  in  $\frac{ml}{gm}$

$p$  = pressure in decibars

Potential C:

The potential beam attenuation coefficient is merely the negative natural logarithm of the potential transmission. That is:

$$\text{Pot C} = - \ln (\text{Pot TR})$$

SUMMARY OF TERMS LISTED (AND ACCURACY OF EACH)

- DEPTH - actual depth in meters ( $\pm 6.5$  m)
- T - temperatures in  $^{\circ}\text{C}$  ( $\pm 0.04^{\circ}\text{C}$ )
- S - salinity in  $\text{‰}$  ( $\pm 0.07 \text{ ‰}$ )
- SIG-T - sigma-t in  $\frac{\text{g}}{\text{ml}} \times 10^3$  ( $< \pm 0.01 \frac{\text{g}}{\text{ml}} \times 10^3$ )
- SVA - specific volume anomaly in  $\frac{\text{ml}}{\text{g}} \times 10^5$  ( $\pm 0.04 \frac{\text{ml}}{\text{g}} \times 10^5$ )
- DELD - dynamic height anomaly in dynamic meters ( $\pm 2\%$  of the value at any depth)
- %TR - index-of-refraction-corrected beam transmission in % per meter ( $\pm 0.03\%$  transmission)
- Pot TR - potential beam transmission in % transmission per meter ( $\pm 0.03\%$  transmission)
- Pot C - potential beam attenuation coefficient in  $\text{m}^{-1}$  ( $0.001 \text{ m}^{-1}$ )



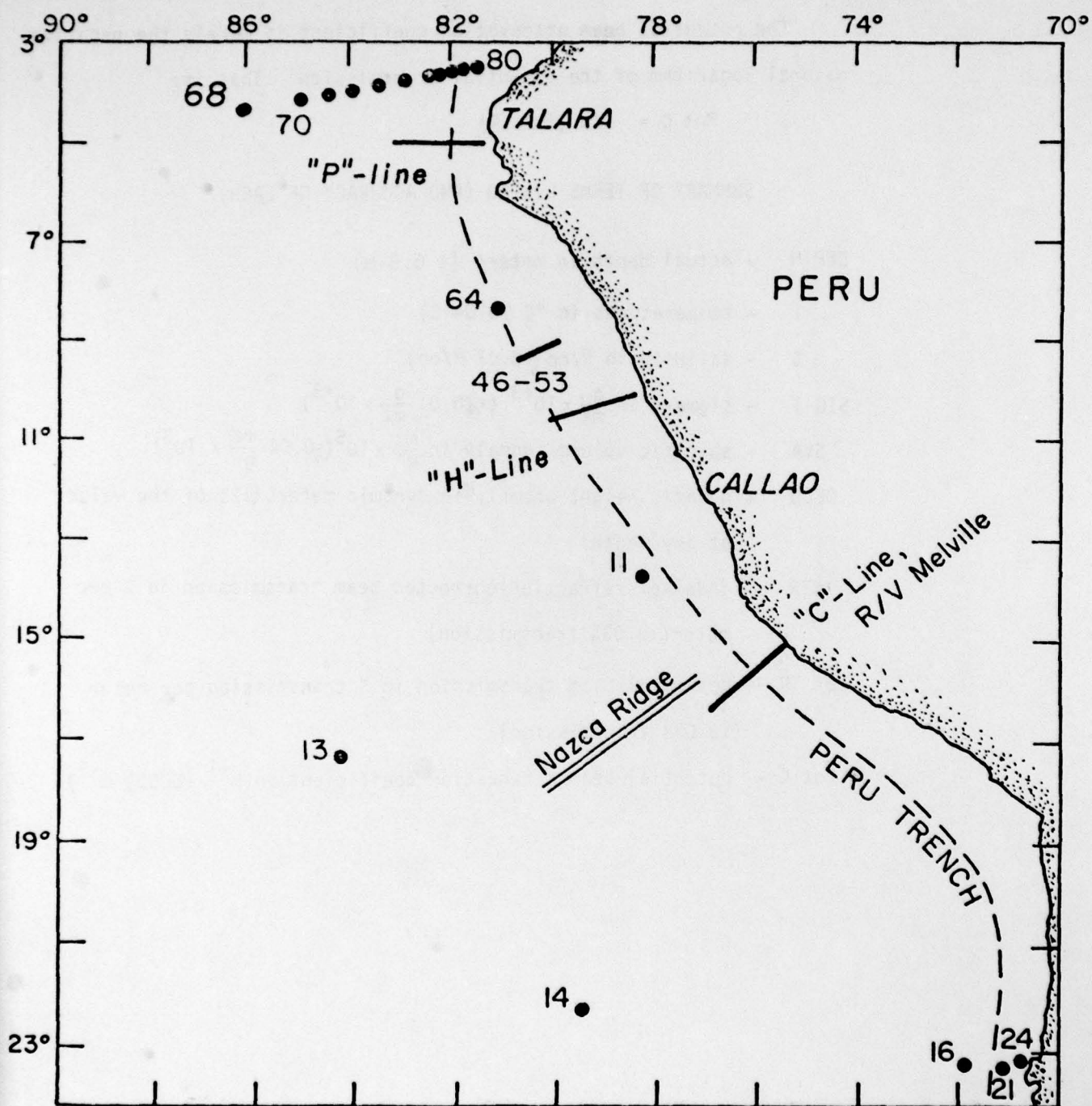


TABLE 1

## SUMMARY OF DATA

<u>Station Number</u>	<u>Date and Time</u>	<u>Location</u>	<u>Depth</u>
11	5/23/77, 2100	13°49.2'S 78°17.2'W	4736 m
13	5/25/77, 1100	17°29.5'S 84°17.6'W	4648 m
14	5/27/77, 0700	22°14.6'S 79°30.4'W	4984 m
16	5/28/77, 1945	23°15.1'S 71°48.8'W	4599 m
21	5/30/77, 0002	23°20.6'S 70°56.8'W	3868 m
24	5/30/77, 1622	22°59.9'S 70°40.3'W	884 m
25	5/30/77, 1830	22°59.9	524 m
34	6/03/77, 0140	13°11.8'S 77°15.2'W	1422 m
46	6/07/77, 0705	09°59.5'S 79°23.5'W	220 m
47	6/07/77, 0800	09°02.5'S 79°59.2'W	543 m
48	6/07/77, 0900	09°03.5'S 80°03.5'W	1128 m
49	6/07/77, 1030	09°06.1'S 80°08.2'W	1733 m
50	6/07/77, 1130	09°07.3'S 80°13.1'W	2132 m
51	6/07/77, 1315	09°09.4'S 80°18.4'W	3089 m
52	6/07/77, 1515	09°00.0'S 80°25.4'W	4213 m
53	6/07/77, 1815	09°17.7'S 80°36.1'W	6273 m
63	6/09/77, 1225	08°20.4'S 81°01.8'W	6264 m
68	6/13/77, 0440	04°18.4'S 86°00.2'W	3556 m
70	6/13/77, 1545	04°10.8'S 84°58.3'W	3496 m
71	6/13/77, 2000	04°02.7'S 84°29.8'W	3374 m
72	6/13/77, 2340	03°55.8'S 83°59.1'W	3187 m
73	6/14/77, 0330	03°51.3'S 83°32.8'W	2778 m
74	6/14/77, 0715	03°44.9'S 83°03.1'W	3536 m
75	6/14/77, 1200	03°41.0'S 82°31.0'W	3659 m
*76	6/14/77, 1900	03°39.0'S 82°14.5'W	3733 m
77	6/14/77, 2045	03°36.2'S 82°00.1'W	4142 m
*78	6/15/77, 0000	03°33.2'S 81°44.9'W	3200 m
80	6/15/77, 0630	03°29.4'S 81°29.0'W	1967 m
82	6/15/77, 0845	03°41.7'S 81°26.0'W	999 m
85	6/16/77, 0015	03°28.8'S 81°16.8'W	536 m

\* Surface cast of top 500 m only.

### Acknowledgments

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### REFERENCES

- Bartz, R., J. R. V. Zaneveld, and H. Pak, 1978, A transmissometer for profiling and moored observations in water. In: Proceedings of Society of Photo-Optical Instrumentation Engineers, Vol. 160, Ocean Optics V.
- Bissett-Berman Corporation, 1968, Operation and maintenance manual for Salinity/Temperature/Depth measuring system model 9040, The Bissett-Berman Corp., San Diego, California.
- Bradshaw, A. and K. E. Schleicher, 1965, The effect of pressure on the electrical conductance of seawater, Deep-Sea Res., 12:151-162.
- Brown, N. L., 1966, The development of a precise set of data relating conductivity to salinity and temperature, Paper No. 18, Proc. of Conf. on Electronic Engineering in Oceanography, Inst. of Electrical and Radio Engineers, London.
- Clarke, G. L. and H. R. James, 1939, Laboratory analysis of the selective absorption of light by seawater, J. Opt. Soc. Amer., 29:43-55.
- Hill, M. N., 1962, The Sea, V. 1, Interscience Publishers, New York, 864 pp.
- Knudsen, M., 1901, Hydrographische Tabellen, G.E.C. Gad., Copenhagen; Williams and Norgate, London, 63 pp.
- Leyendekkers, J. V., 1977, Prediction of the refractive index of seawater as a function of temperature, pressure, salinity and wavelength, Mar. Chem., 5:29-42.
- Sullivan, S. A., 1963, Experimental study of the absorption in distilled water, artificial seawater, and heavy water in the visible region of the spectrum, J. Opt. Soc. Amer., 53; 962-968.
- Sweers, H. E., 1971, A comparison of methods used to calculate sigma-t, specific volume anomaly and dynamic height, MTS Journal, 5:7-25.



## WELOC 77 STA 11 23-MAY-77 2100 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	21.64	35.38	24.63	332.43	0.03	43.03	43.03	0.849
20	21.52	35.33	24.62	333.89	0.07	46.81	46.82	0.760
30	20.57	34.48	24.23	371.47	0.10	50.18	50.18	0.693
40	17.74	34.72	25.14	284.98	0.14	59.67	59.68	0.515
50	16.95	34.95	25.51	249.92	0.16	62.11	62.12	0.477
60	16.50	34.88	25.56	245.57	0.18	62.94	62.94	0.460
70	15.88	34.85	25.68	234.38	0.21	63.31	63.32	0.460
80	15.17	34.81	25.82	222.15	0.23	63.41	63.42	0.460
90	14.62	34.83	25.94	209.84	0.25	62.28	62.29	0.470
100	14.23	34.84	26.04	200.85	0.27	62.78	62.79	0.470
110	13.94	34.77	26.04	200.79	0.29	61.62	61.63	0.490
120	13.53	34.77	26.13	192.90	0.31	60.37	60.39	0.510
130	13.30	34.84	26.23	184.19	0.33	60.35	60.37	0.510
140	13.17	34.83	26.25	182.26	0.36	60.71	60.73	0.500
150	12.97	34.81	26.26	180.31	0.37	60.84	60.86	0.500
160	12.79	34.83	26.32	175.62	0.39	61.08	61.10	0.490
170	12.63	34.81	26.34	173.76	0.41	61.19	61.22	0.490
180	12.48	34.82	26.37	171.01	0.42	61.59	61.62	0.483
190	12.33	34.83	26.42	167.61	0.44	61.86	61.88	0.480
200	12.20	34.84	26.45	164.36	0.46	62.13	62.16	0.480
210	12.06	34.82	26.46	163.64	0.47	61.86	61.89	0.480
220	11.94	34.83	26.48	161.59	0.49	62.17	62.20	0.475
230	11.71	34.74	26.46	163.85	0.51	62.87	62.90	0.465
240	11.54	34.78	26.53	157.38	0.52	62.96	63.00	0.460
250	11.43	34.80	26.56	154.43	0.54	62.64	62.67	0.470
260	11.24	34.71	26.52	158.18	0.55	62.62	62.65	0.470
270	10.99	34.73	26.59	152.27	0.57	63.41	63.44	0.460
280	10.82	34.68	26.58	152.99	0.58	63.62	63.66	0.450
290	10.67	34.70	26.62	149.45	0.60	63.76	63.80	0.450
300	10.53	34.73	26.67	145.50	0.61	63.73	63.77	0.450
310	10.37	34.69	26.66	145.59	0.63	63.58	63.62	0.450
320	10.22	34.66	26.67	145.00	0.64	63.61	63.65	0.450
330	10.02	34.67	26.71	141.64	0.66	63.16	63.21	0.460
340	9.83	34.65	26.73	139.54	0.67	63.10	63.15	0.460
350	9.68	34.67	26.77	136.24	0.68	63.35	63.39	0.460
360	9.58	34.65	26.77	136.36	0.70	63.44	63.49	0.460
370	9.45	34.66	26.79	133.58	0.71	63.54	63.59	0.450
380	9.28	34.63	26.80	133.41	0.72	64.01	64.06	0.450
390	9.12	34.59	26.80	133.91	0.74	64.22	64.27	0.440
400	9.00	34.64	26.86	128.18	0.75	64.33	64.38	0.440
410	8.91	34.65	26.88	126.55	0.76	64.69	64.74	0.432
420	8.82	34.62	26.88	127.03	0.78	64.89	64.94	0.430
430	8.70	34.63	26.90	124.76	0.79	64.82	64.87	0.430
440	8.60	34.61	26.90	124.47	0.80	64.82	64.87	0.430
450	8.47	34.57	26.89	126.01	0.81	64.77	64.82	0.430
460	8.30	34.59	26.93	122.41	0.83	64.85	64.91	0.430
470	8.17	34.63	26.98	117.28	0.84	64.89	64.95	0.430
480	8.05	34.64	27.01	114.66	0.85	64.91	64.97	0.430
490	7.93	34.61	27.00	115.91	0.86	64.93	64.99	0.430
500	7.80	34.57	26.98	116.96	0.87	64.96	65.02	0.430
600	6.85	34.52	27.09	107.92	0.98	64.96	65.03	0.430
700	5.97	34.54	27.21	96.30	1.08	64.91	65.00	0.430
800	5.40	34.54	27.28	89.98	1.18	65.03	65.13	0.430
900	4.94	34.56	27.35	83.17	1.27	65.08	65.19	0.430
1000	4.58	34.56	27.40	79.08	1.34	65.10	65.23	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	4.16	34.57	27.45	75.10	1.42	65.16	65.30	0.430
1200	3.89	34.57	27.48	72.19	1.50	65.12	65.27	0.430
1300	3.57	34.67	27.59	61.47	1.56	65.10	65.27	0.430
1400	3.30	34.64	27.59	61.69	1.63	65.06	65.24	0.430
1500	3.10	34.64	27.61	59.47	1.68	65.00	65.19	0.430
1600	2.88	34.66	27.64	56.58	1.74	65.01	65.21	0.430
1700	2.73	34.67	27.67	54.30	1.80	65.05	65.26	0.430
1800	2.60	34.68	27.69	52.51	1.85	64.96	65.19	0.430
1900	2.44	34.68	27.70	50.93	1.90	65.08	65.32	0.430
2000	2.34	34.70	27.73	48.48	1.95	64.96	65.22	0.430
2100	2.23	34.71	27.75	46.87	1.99	64.92	65.19	0.430
2200	2.14	34.73	27.76	45.36	2.04	64.88	65.17	0.430
2300	2.06	34.73	27.77	44.81	2.09	64.88	65.18	0.430
2400	1.97	34.73	27.78	43.25	2.13	64.88	65.18	0.430
2500	1.92	34.75	27.80	41.86	2.17	64.90	65.22	0.430
2600	1.88	34.76	27.81	41.41	2.22	64.81	65.14	0.430
2700	1.84	34.75	27.81	41.52	2.26	64.71	65.06	0.430
2800	1.81	34.76	27.82	41.05	2.30	64.80	65.15	0.430
2900	1.81	34.76	27.82	41.46	2.34	64.82	65.19	0.430
3000	1.80	34.74	27.80	42.51	2.39	64.80	65.18	0.430
3100	1.80	34.76	27.82	41.88	2.43	64.79	65.18	0.430
3200	1.79	34.76	27.82	42.07	2.47	64.80	65.20	0.430
3300	1.80	34.76	27.82	42.33	2.51	64.76	65.18	0.430
3400	1.80	34.75	27.81	43.33	2.56	64.69	65.13	0.430
3500	1.80	34.76	27.81	43.85	2.60	64.64	65.08	0.430
3600	1.79	34.75	27.81	44.04	2.64	64.51	64.97	0.430
3700	1.78	34.77	27.82	43.34	2.68	64.42	64.89	0.430
3800	1.78	34.75	27.81	44.08	2.73	64.33	64.81	0.439
3900	1.76	34.77	27.82	43.84	2.77	64.42	64.91	0.430
4000	1.76	34.77	27.83	43.76	2.82	64.39	64.90	0.430
4100	1.76	34.76	27.82	44.95	2.86	64.34	64.86	0.430
4200	1.76	34.78	27.83	43.78	2.90	64.28	64.81	0.440
4300	1.76	34.77	27.83	44.60	2.95	64.19	64.73	0.440
4400	1.76	34.77	27.83	44.84	2.99	64.14	64.70	0.440
4500	1.76	34.78	27.84	44.31	3.04	64.07	64.64	0.440
4600	1.76	34.76	27.82	46.00	3.08	63.76	64.35	0.440
4700	1.77	34.76	27.82	46.88	3.13	63.54	64.14	0.4487
4734	1.78	34.84	27.89	41.26	3.15	63.67	64.27	0.440

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## WELOC 77 STA 13 25-MAY-77 1100 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	21.65	35.61	24.80	316.64	0.03	62.29	62.29	0.470
20	21.65	35.60	24.79	317.18	0.07	62.28	62.29	0.470
30	21.65	35.61	24.80	316.85	0.10	62.28	62.29	0.470
40	21.65	35.60	24.79	318.35	0.13	62.38	62.38	0.470
50	21.65	35.61	24.80	317.76	0.16	62.42	62.42	0.470
60	20.34	35.25	24.87	311.69	0.19	61.28	61.29	0.493
70	18.08	35.09	25.34	267.20	0.22	60.77	60.78	0.497
80	17.80	35.20	25.49	253.25	0.24	62.22	62.23	0.478
90	17.49	35.17	25.55	247.87	0.27	63.33	63.34	0.459
100	17.20	35.15	25.60	242.71	0.29	63.76	63.77	0.450
110	17.02	35.15	25.64	239.13	0.32	64.11	64.12	0.450
120	16.56	35.03	25.66	237.62	0.34	64.50	64.52	0.440
130	16.30	35.00	25.69	234.77	0.37	64.72	64.74	0.440
140	15.82	34.81	25.66	238.15	0.39	64.87	64.88	0.430
150	15.24	34.77	25.76	229.00	0.41	64.95	64.97	0.430
160	14.50	34.59	25.79	226.67	0.43	65.06	65.08	0.430
170	13.75	34.52	25.90	216.60	0.46	65.11	65.13	0.430
180	13.02	34.45	25.99	208.10	0.48	65.07	65.09	0.430
190	12.38	34.45	26.10	196.88	0.50	65.05	65.08	0.430
200	12.05	34.48	26.19	188.25	0.52	65.10	65.12	0.430
210	11.88	34.63	26.34	174.24	0.53	65.06	65.09	0.430
220	11.77	34.68	26.40	168.70	0.55	65.05	65.07	0.430
230	11.48	34.60	26.40	169.20	0.57	65.03	65.05	0.430
240	11.23	34.65	26.48	162.28	0.59	65.11	65.14	0.430
250	11.02	34.65	26.53	157.99	0.60	65.10	65.14	0.430
260	10.83	34.65	26.55	154.82	0.62	65.11	65.15	0.430
270	10.70	34.64	26.57	153.53	0.63	65.12	65.16	0.430
280	10.55	34.65	26.60	150.93	0.65	65.13	65.16	0.430
290	10.40	34.64	26.62	149.01	0.66	65.16	65.19	0.430
300	10.27	34.65	26.65	147.03	0.68	65.15	65.19	0.430
310	10.15	34.65	26.68	144.88	0.70	65.15	65.19	0.430
320	10.01	34.62	26.67	144.86	0.71	65.10	65.14	0.430
330	9.88	34.64	26.72	140.75	0.72	65.12	65.16	0.430
340	9.73	34.63	26.73	139.88	0.73	65.08	65.12	0.430
350	9.53	34.63	26.76	137.07	0.75	65.08	65.12	0.430
360	9.38	34.65	26.81	132.88	0.76	65.04	65.09	0.430
370	9.22	34.63	26.81	132.65	0.78	65.06	65.10	0.430
380	9.07	34.58	26.80	133.08	0.79	65.08	65.12	0.430
390	8.88	34.59	26.84	129.69	0.80	65.05	65.10	0.430
400	8.71	34.61	26.87	126.46	0.82	65.06	65.11	0.430
410	8.55	34.60	26.89	124.93	0.83	65.04	65.09	0.430
420	8.42	34.56	26.89	125.63	0.84	65.01	65.06	0.430
430	8.24	34.62	26.96	118.57	0.85	64.97	65.02	0.430
440	8.13	34.60	26.97	118.38	0.87	65.00	65.05	0.430
450	8.00	34.54	26.94	121.09	0.88	65.00	65.06	0.430
460	7.91	34.56	26.97	118.01	0.89	65.00	65.06	0.430
470	7.81	34.55	26.97	117.83	0.90	65.03	65.09	0.430
480	7.67	34.50	26.95	119.29	0.91	65.05	65.11	0.430
490	7.54	34.54	27.00	115.22	0.92	65.10	65.16	0.430
500	7.45	34.55	27.03	113.13	0.94	65.12	65.18	0.430
600	6.58	34.53	27.13	103.63	1.04	65.18	65.26	0.430
700	5.84	34.51	27.21	96.20	1.14	65.27	65.36	0.430
800	5.27	34.50	27.27	91.14	1.24	65.29	65.39	0.430
900	4.79	34.51	27.34	84.67	1.33	65.37	65.48	0.420
1000	4.34	34.57	27.43	76.42	1.40	65.41	65.53	0.420

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	3.97	34.68	27.56	64.44	1.48	65.46	65.59	0.420
1200	3.64	34.62	27.55	65.20	1.55	65.47	65.62	0.420
1300	3.34	34.59	27.56	64.27	1.61	65.44	65.60	0.420
1400	3.07	34.61	27.60	60.38	1.68	65.50	65.68	0.420
1500	2.87	34.66	27.65	55.51	1.74	65.49	65.68	0.420
1600	2.70	34.64	27.65	55.36	1.79	65.52	65.72	0.420
1700	2.57	34.66	27.68	52.90	1.84	65.46	65.68	0.420
1800	2.43	34.66	27.68	52.27	1.89	65.44	65.67	0.420
1900	2.30	34.71	27.73	47.13	1.94	65.27	65.52	0.420
2000	2.20	34.67	27.71	49.15	2.00	65.33	65.58	0.420
2100	2.10	34.72	27.76	45.03	2.04	65.34	65.60	0.420
2200	2.03	34.71	27.76	45.20	2.08	65.36	65.64	0.420
2300	1.96	34.76	27.80	40.91	2.13	65.31	65.60	0.420
2400	1.90	34.71	27.77	44.43	2.17	65.27	65.57	0.420
2500	1.85	34.72	27.78	43.62	2.21	65.32	65.63	0.420
2600	1.82	34.73	27.80	42.28	2.25	65.34	65.66	0.420
2700	1.81	34.73	27.79	42.24	2.30	65.33	65.66	0.420
2800	1.79	34.74	27.81	42.00	2.34	65.18	65.54	0.420
2900	1.78	34.75	27.81	41.72	2.39	65.23	65.60	0.420
3000	1.78	34.77	27.83	40.64	2.42	65.23	65.61	0.420
3100	1.77	34.79	27.84	39.24	2.47	65.19	65.58	0.420
3200	1.77	34.74	27.80	43.26	2.51	65.09	65.49	0.420
3300	1.76	34.64	27.73	50.21	2.55	65.02	65.44	0.430
3400	1.76	34.59	27.69	54.41	2.60	64.98	65.41	0.430
3500	1.75	34.75	27.82	43.49	2.63	65.00	65.44	0.420
3600	1.75	34.74	27.81	44.42	2.68	64.96	65.42	0.430
3700	1.75	34.77	27.83	42.57	2.72	64.86	65.32	0.430
3800	1.75	34.74	27.81	44.99	2.77	64.80	65.28	0.430
3900	1.74	34.75	27.81	44.17	2.81	64.69	65.19	0.430
4000	1.74	34.73	27.80	45.92	2.86	64.67	65.17	0.430
4100	1.74	34.76	27.82	44.31	2.90	64.55	65.06	0.430
4200	1.75	34.80	27.85	41.45	2.95	64.49	65.02	0.430
4300	1.75	34.79	27.85	43.28	2.99	64.40	64.95	0.430
4400	1.77	34.71	27.79	48.83	3.04	64.26	64.82	0.436
4500	1.78	34.79	27.84	44.33	3.08	64.02	64.59	0.440
4600	1.79	34.78	27.83	45.69	3.13	63.87	64.45	0.440
4646	1.80	34.78	27.84	45.61	3.15	63.90	64.49	0.440



## WELOC 77 STA 14B 27-MAY-77 0700 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	20.46	35.26	24.85	311.01	0.04	62.47	62.47	0.470
20	20.46	35.26	24.86	311.22	0.07	62.47	62.47	0.470
30	20.46	35.25	24.85	312.35	0.10	62.47	62.48	0.470
40	20.46	35.25	24.85	312.83	0.13	62.47	62.48	0.470
50	20.46	35.22	24.82	315.57	0.16	62.47	62.47	0.470
60	19.33	34.14	24.29	366.34	0.19	59.03	59.04	0.532
70	16.41	34.28	25.12	287.48	0.22	60.34	60.35	0.505
80	15.56	34.35	25.37	264.78	0.25	61.71	61.72	0.485
90	15.05	34.36	25.49	253.43	0.28	62.76	62.77	0.466
100	14.71	34.48	25.65	237.70	0.30	63.25	63.26	0.460
110	14.39	34.40	25.66	237.11	0.32	63.62	63.63	0.450
120	14.05	34.32	25.67	236.67	0.35	63.91	63.93	0.450
130	13.58	34.28	25.74	230.66	0.37	64.16	64.17	0.444
140	12.92	34.12	25.75	229.28	0.40	64.37	64.39	0.440
150	12.44	34.14	25.85	219.57	0.41	64.48	64.49	0.440
160	11.97	34.17	25.97	208.12	0.43	64.55	64.57	0.440
170	11.56	34.20	26.08	198.94	0.45	64.75	64.77	0.440
180	11.28	34.37	26.25	182.15	0.47	64.76	64.78	0.440
190	11.19	34.43	26.32	175.27	0.49	64.77	64.79	0.440
200	11.11	34.47	26.36	171.55	0.51	64.77	64.80	0.440
210	11.05	34.55	26.44	165.08	0.53	64.75	64.78	0.440
220	11.07	34.58	26.46	163.45	0.55	64.75	64.78	0.440
230	10.99	34.58	26.47	162.72	0.56	64.78	64.81	0.440
240	10.88	34.60	26.51	159.33	0.58	64.74	64.77	0.440
250	10.70	34.45	26.42	167.24	0.59	64.76	64.79	0.436
260	10.21	34.41	26.47	162.38	0.61	64.78	64.81	0.430
270	9.81	34.43	26.56	154.11	0.62	64.81	64.84	0.430
280	9.56	34.41	26.58	152.33	0.64	64.81	64.85	0.430
290	9.35	34.46	26.66	144.85	0.65	64.79	64.82	0.437
300	9.19	34.44	26.67	144.26	0.67	64.84	64.88	0.430
310	9.08	34.46	26.71	140.74	0.68	64.88	64.92	0.430
320	8.98	34.47	26.73	138.57	0.70	64.85	64.89	0.430
330	8.87	34.46	26.74	138.43	0.71	64.90	64.94	0.430
340	8.71	34.43	26.74	137.85	0.72	64.87	64.91	0.430
350	8.58	34.47	26.79	133.63	0.74	64.89	64.93	0.430
360	8.34	34.41	26.78	134.27	0.75	64.90	64.95	0.430
370	8.11	34.41	26.82	131.05	0.77	64.92	64.96	0.430
380	7.95	34.48	26.90	123.83	0.78	64.92	64.97	0.430
390	7.89	34.48	26.91	122.67	0.79	64.93	64.98	0.430
400	7.83	34.43	26.88	125.58	0.80	64.91	64.96	0.430
410	7.67	34.43	26.89	123.99	0.82	64.88	64.94	0.430
420	7.47	34.39	26.89	123.98	0.83	64.97	65.03	0.430
430	7.27	34.39	26.93	120.65	0.84	65.07	65.12	0.430
440	7.17	34.41	26.95	118.32	0.85	65.12	65.17	0.430
450	7.08	34.36	26.92	121.20	0.86	65.12	65.18	0.430
460	6.93	34.41	26.99	115.26	0.87	65.12	65.18	0.430
470	6.84	34.40	26.99	114.86	0.89	65.17	65.23	0.430
480	6.79	34.45	27.04	110.44	0.90	65.18	65.24	0.430
490	6.71	34.45	27.04	110.06	0.91	65.18	65.24	0.430
500	6.66	34.45	27.05	109.43	0.92	63.36	63.42	0.457
600	5.97	34.44	27.13	102.33	1.02	65.30	65.38	0.430
700	5.43	34.46	27.22	94.83	1.13	65.33	65.42	0.430
800	4.98	34.50	27.30	87.64	1.21	65.33	65.43	0.430
900	4.59	34.50	27.35	83.16	1.30	65.33	65.45	0.422
1000	4.20	34.52	27.41	77.67	1.38	65.33	65.45	0.420

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
1100	3.85	34.57	27.48	70.83	1.46	65.37	65.51	0.420
1200	3.54	34.58	27.52	67.38	1.53	65.39	65.54	0.420
1300	3.28	34.59	27.55	64.02	1.59	65.39	65.55	0.420
1400	3.04	34.68	27.64	55.42	1.65	65.38	65.56	0.420
1500	2.87	34.64	27.63	56.80	1.71	65.47	65.65	0.420
1600	2.67	34.63	27.64	55.60	1.77	65.45	65.66	0.420
1700	2.51	34.65	27.67	52.99	1.82	65.44	65.65	0.420
1800	2.41	34.67	27.69	50.81	1.87	65.48	65.70	0.420
1900	2.29	34.67	27.71	49.83	1.92	65.45	65.69	0.420
2000	2.19	34.69	27.72	48.35	1.97	65.43	65.69	0.420
2100	2.13	34.70	27.74	46.44	2.02	65.39	65.66	0.420
2200	2.06	34.69	27.75	46.20	2.07	65.34	65.62	0.420
2300	2.00	34.68	27.74	47.13	2.11	65.38	65.68	0.420
2400	1.96	34.71	27.76	45.12	2.16	65.31	65.62	0.420
2500	1.90	34.72	27.78	44.32	2.20	65.34	65.66	0.420
2600	1.87	34.71	27.78	44.17	2.25	65.35	65.68	0.420
2700	1.84	34.69	27.76	45.90	2.29	65.37	65.71	0.420
2800	1.81	34.71	27.77	44.82	2.34	65.32	65.68	0.420
2900	1.80	34.72	27.78	44.45	2.38	65.32	65.68	0.420
3000	1.78	34.72	27.79	44.06	2.42	65.26	65.64	0.420
3100	1.77	34.72	27.79	43.90	2.47	65.21	65.60	0.420
3200	1.75	34.72	27.79	44.10	2.51	65.18	65.58	0.420
3300	1.74	34.71	27.78	45.61	2.56	65.12	65.54	0.420
3400	1.72	34.71	27.78	45.34	2.60	65.07	65.50	0.420
3500	1.72	34.72	27.79	44.79	2.64	65.00	65.44	0.429
3600	1.71	34.70	27.78	46.09	2.69	64.92	65.37	0.430
3700	1.72	34.71	27.78	46.00	2.74	64.84	65.30	0.430
3800	1.72	34.73	27.80	45.31	2.78	64.82	65.30	0.430
3900	1.73	34.70	27.77	47.80	2.83	64.76	65.25	0.430
4000	1.74	34.74	27.80	45.78	2.88	64.69	65.19	0.430
4100	1.75	34.71	27.78	47.78	2.92	64.55	65.07	0.430
4200	1.76	34.69	27.77	49.57	2.97	64.55	65.08	0.430
4300	1.77	34.68	27.76	50.77	3.02	64.45	64.99	0.430
4400	1.78	34.68	27.76	51.31	3.07	64.36	64.92	0.430
4500	1.79	34.69	27.76	51.19	3.12	64.23	64.81	0.440
4600	1.81	34.79	27.84	44.89	3.17	64.17	64.75	0.440
4700	1.82	34.70	27.77	51.80	3.23	64.11	64.71	0.440
4800	1.84	34.75	27.81	48.44	3.28	64.02	64.63	0.440
4900	1.85	34.69	27.76	53.69	3.33	63.83	64.46	0.440
4982	1.86	34.68	27.75	54.20	3.37	63.27	63.90	0.450



## WELOC 77 STA 16 28-MAY-77 1945 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	19.89	35.14	24.91	305.67	0.03	60.55	60.55	0.500
20	19.89	35.12	24.90	307.23	0.06	60.54	60.54	0.500
30	18.67	33.82	24.22	372.16	0.11	57.98	57.99	0.549
40	15.72	34.24	25.25	274.27	0.13	58.76	58.76	0.532
50	14.75	34.29	25.49	251.05	0.16	61.32	61.32	0.491
60	13.88	34.42	25.79	223.81	0.18	62.72	62.73	0.472
70	13.24	34.33	25.85	218.53	0.20	63.82	63.83	0.450
80	12.64	34.25	25.90	213.54	0.22	64.32	64.33	0.440
90	12.15	34.28	26.03	201.58	0.25	64.55	64.56	0.440
100	11.90	34.39	26.16	189.51	0.26	64.57	64.59	0.440
110	11.78	34.52	26.28	177.77	0.28	64.80	64.81	0.435
120	11.84	34.67	26.38	168.28	0.30	65.07	65.08	0.430
130	11.87	34.64	26.36	171.53	0.32	65.04	65.06	0.430
140	11.79	34.77	26.47	160.54	0.33	64.97	64.99	0.430
150	11.90	34.75	26.44	164.10	0.34	64.93	64.94	0.430
160	11.79	34.70	26.42	166.08	0.36	64.58	64.60	0.440
170	11.68	34.73	26.47	161.76	0.38	63.56	63.58	0.457
180	11.52	34.72	26.48	160.66	0.39	64.37	64.39	0.440
190	11.38	34.69	26.49	160.53	0.41	64.86	64.88	0.433
200	11.20	34.65	26.49	160.08	0.43	64.94	64.96	0.430
210	11.00	34.66	26.53	156.25	0.44	65.11	65.14	0.430
220	10.86	34.65	26.55	154.55	0.46	65.14	65.16	0.430
230	10.71	34.63	26.55	154.00	0.47	65.24	65.26	0.430
240	10.59	34.65	26.60	150.70	0.49	65.26	65.28	0.430
250	10.45	34.68	26.64	146.52	0.51	65.23	65.26	0.430
260	10.38	34.65	26.62	148.23	0.52	65.24	65.27	0.430
270	10.22	34.65	26.67	144.62	0.53	65.14	65.17	0.430
280	10.08	34.62	26.66	145.26	0.55	65.10	65.14	0.430
290	9.93	34.64	26.70	142.08	0.56	65.15	65.18	0.430
300	9.82	34.64	26.72	139.85	0.58	65.16	65.19	0.430
310	9.70	34.58	26.70	142.43	0.59	65.17	65.21	0.430
320	9.49	34.54	26.70	142.11	0.60	65.16	65.20	0.430
330	9.33	34.54	26.73	139.38	0.62	65.13	65.17	0.430
340	9.14	34.52	26.73	138.55	0.63	65.11	65.15	0.430
350	8.92	34.47	26.74	138.23	0.65	65.09	65.13	0.430
360	8.80	34.54	26.81	131.82	0.66	65.08	65.13	0.430
370	8.66	34.51	26.81	131.69	0.67	65.04	65.08	0.430
380	8.52	34.53	26.85	128.26	0.69	65.06	65.11	0.430
390	8.42	34.55	26.88	125.80	0.70	65.05	65.10	0.430
400	8.26	34.55	26.91	123.00	0.71	65.03	65.08	0.430
410	8.13	34.55	26.93	121.47	0.72	65.04	65.09	0.430
420	8.05	34.53	26.92	121.82	0.74	65.05	65.10	0.430
430	7.92	34.51	26.92	121.93	0.75	65.05	65.10	0.430
440	7.79	34.50	26.94	120.59	0.76	65.04	65.10	0.430
450	7.67	34.49	26.95	119.84	0.77	65.08	65.14	0.430
460	7.53	34.49	26.96	118.05	0.79	65.17	65.22	0.430
470	7.40	34.46	26.96	118.75	0.80	65.21	65.27	0.430
480	7.27	34.49	27.00	114.81	0.81	65.21	65.27	0.430
490	7.15	34.44	26.98	116.68	0.82	65.22	65.28	0.430
500	6.98	34.46	27.01	113.64	0.83	65.25	65.31	0.430
600	6.17	34.47	27.14	102.68	0.94	65.39	65.46	0.420
700	5.58	34.45	27.20	97.17	1.04	65.34	65.43	0.430
800	5.08	34.47	27.27	90.83	1.13	65.28	65.38	0.430
900	4.67	34.46	27.30	87.69	1.22	65.33	65.45	0.420
1000	4.27	34.51	27.40	79.49	1.30	65.37	65.49	0.420

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
1100	3.91	34.53	27.45	74.58	1.38	65.37	65.50	0.420
1200	3.65	34.55	27.49	70.45	1.45	65.41	65.56	0.420
1300	3.39	34.57	27.53	66.76	1.51	65.31	65.47	0.420
1400	3.14	34.61	27.59	61.50	1.58	65.38	65.55	0.420
1500	2.90	34.61	27.61	59.48	1.64	65.32	65.51	0.420
1600	2.76	34.64	27.64	56.05	1.70	65.34	65.55	0.420
1700	2.58	34.66	27.68	52.93	1.75	65.35	65.57	0.420
1800	2.45	34.66	27.69	51.78	1.81	65.37	65.60	0.420
1900	2.34	34.69	27.71	49.28	1.85	65.35	65.59	0.420
2000	2.23	34.68	27.72	48.50	1.90	65.27	65.52	0.420
2100	2.14	34.69	27.73	47.26	1.95	65.29	65.55	0.420
2200	2.06	34.70	27.75	46.39	2.00	65.25	65.53	0.420
2300	1.99	34.70	27.76	45.29	2.05	65.22	65.52	0.420
2400	1.94	34.72	27.77	44.39	2.09	65.22	65.53	0.420
2500	1.88	34.72	27.77	43.87	2.14	65.25	65.56	0.420
2600	1.85	34.74	27.79	42.52	2.18	65.22	65.54	0.420
2700	1.82	34.73	27.79	42.83	2.22	65.22	65.56	0.420
2800	1.80	34.73	27.79	42.99	2.26	65.20	65.56	0.420
2900	1.78	34.71	27.78	44.40	2.31	65.28	65.64	0.420
3000	1.77	34.67	27.75	47.53	2.35	65.16	65.54	0.420
3100	1.76	34.69	27.76	46.37	2.40	65.10	65.49	0.420
3200	1.75	34.75	27.81	42.15	2.44	65.06	65.46	0.420
3300	1.75	34.70	27.78	45.88	2.48	65.00	65.42	0.430
3400	1.74	34.70	27.77	46.28	2.53	64.95	65.38	0.430
3500	1.73	34.72	27.79	45.51	2.58	64.93	65.37	0.430
3600	1.72	34.74	27.81	43.72	2.62	64.89	65.35	0.430
3700	1.72	34.71	27.78	46.35	2.66	64.83	65.30	0.430
3800	1.71	34.73	27.80	45.01	2.71	64.82	65.30	0.430
3900	1.71	34.74	27.80	45.10	2.76	64.74	65.23	0.430
4000	1.71	34.72	27.80	46.39	2.80	64.71	65.21	0.430
4100	1.71	34.72	27.79	46.58	2.85	64.61	65.13	0.430
4200	1.71	34.74	27.81	45.95	2.90	64.60	65.13	0.430
4300	1.71	34.71	27.79	47.49	2.94	64.48	65.03	0.430
4400	1.72	34.72	27.80	47.39	2.99	64.41	64.97	0.430
4500	1.72	34.71	27.78	48.63	3.04	64.31	64.88	0.430
4597	1.73	34.71	27.78	49.45	3.08	64.17	64.75	0.440



## WELOC 77 STA 21 30-MAY-77 0002 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	17.08	34.42	25.06	291.35	0.04	49.38	49.38	0.779
20	15.66	34.63	25.56	244.44	0.06	60.86	60.86	0.500
30	15.22	34.64	25.66	234.56	0.08	62.84	62.84	0.466
40	14.62	34.53	25.71	230.66	0.10	63.65	63.65	0.450
50	13.82	34.45	25.82	220.18	0.13	63.95	63.95	0.450
60	13.42	34.50	25.94	209.27	0.15	64.06	64.07	0.450
70	13.10	34.33	25.87	215.87	0.17	64.33	64.34	0.440
80	12.60	34.57	26.16	188.96	0.19	64.63	64.65	0.440
90	12.83	34.82	26.31	175.32	0.21	64.35	64.36	0.440
100	12.95	34.74	26.22	183.70	0.22	63.30	63.31	0.460
110	12.78	34.75	26.26	180.00	0.24	63.30	63.31	0.460
120	12.66	34.75	26.29	177.25	0.26	63.48	63.49	0.457
130	12.57	34.81	26.35	172.15	0.28	63.04	63.06	0.460
140	12.46	34.76	26.33	174.19	0.30	62.91	62.93	0.464
150	12.37	34.79	26.38	170.15	0.31	63.00	63.02	0.460
160	12.26	34.75	26.37	171.14	0.33	63.18	63.20	0.460
170	12.14	34.69	26.34	173.41	0.34	63.77	63.79	0.450
180	12.05	34.85	26.49	160.21	0.36	63.52	63.54	0.452
190	12.01	34.77	26.43	166.35	0.38	63.21	63.24	0.460
200	11.90	34.83	26.49	160.06	0.40	63.39	63.42	0.460
210	11.84	34.84	26.52	158.05	0.42	63.39	63.42	0.460
220	11.76	34.78	26.48	161.70	0.43	63.40	63.43	0.460
230	11.64	34.74	26.48	162.14	0.44	63.62	63.65	0.450
240	11.52	34.75	26.50	160.19	0.46	63.76	63.79	0.450
250	11.36	34.72	26.51	159.22	0.48	63.86	63.89	0.450
260	11.25	34.74	26.54	156.30	0.49	63.91	63.94	0.450
270	11.12	34.74	26.57	154.17	0.50	63.97	64.00	0.450
280	10.99	34.68	26.55	155.86	0.52	64.17	64.20	0.440
290	10.79	34.70	26.60	151.63	0.54	64.39	64.43	0.440
300	10.72	34.68	26.60	152.33	0.55	64.39	64.43	0.440
310	10.59	34.71	26.64	148.08	0.57	64.48	64.52	0.440
320	10.46	34.63	26.60	152.11	0.58	64.72	64.76	0.439
330	10.24	34.60	26.62	150.28	0.60	65.21	65.25	0.430
340	10.07	34.61	26.66	146.69	0.61	65.14	65.18	0.430
350	9.80	34.56	26.66	146.36	0.63	65.12	65.16	0.430
360	9.60	34.61	26.73	139.70	0.64	65.13	65.17	0.430
370	9.43	34.59	26.75	137.86	0.66	65.14	65.19	0.430
380	9.36	34.58	26.75	138.22	0.67	65.20	65.25	0.430
390	9.28	34.59	26.77	136.50	0.68	65.22	65.27	0.430
400	9.14	34.54	26.76	138.09	0.70	65.14	65.18	0.430
410	9.04	34.61	26.83	131.52	0.71	65.16	65.21	0.430
420	8.94	34.58	26.83	131.79	0.72	65.16	65.21	0.430
430	8.81	34.55	26.82	132.29	0.74	65.11	65.17	0.430
440	8.68	34.51	26.82	133.21	0.75	65.05	65.10	0.430
450	8.51	34.50	26.83	131.56	0.76	65.04	65.09	0.430
460	8.37	34.54	26.88	127.29	0.78	65.01	65.07	0.430
470	8.22	34.52	26.89	126.28	0.79	65.01	65.07	0.430
480	8.09	34.57	26.94	121.33	0.80	64.97	65.03	0.430
490	7.96	34.50	26.91	123.98	0.81	65.02	65.08	0.430
500	7.67	34.43	26.90	124.88	0.83	65.06	65.12	0.430
600	6.33	34.42	27.08	108.36	0.94	65.29	65.37	0.430
700	5.66	34.44	27.18	99.17	1.05	65.24	65.33	0.430
800	5.07	34.48	27.27	90.28	1.14	65.11	65.21	0.430
900	4.65	34.50	27.34	84.50	1.23	65.13	65.25	0.430
1000	4.28	34.53	27.41	78.01	1.31	65.18	65.31	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	3.91	34.56	27.46	72.90	1.38	64.86	65.01	0.430
1200	3.64	34.62	27.54	65.36	1.45	65.09	65.25	0.430
1300	3.36	34.59	27.55	64.84	1.52	65.16	65.33	0.430
1400	3.13	34.56	27.54	65.18	1.59	65.07	65.25	0.430
1500	2.92	34.61	27.61	59.30	1.64	65.11	65.30	0.430
1600	2.77	34.64	27.64	56.49	1.70	65.16	65.36	0.430
1700	2.59	34.61	27.64	56.83	1.76	65.15	65.37	0.430
1800	2.47	34.66	27.69	52.18	1.81	65.10	65.33	0.430
1900	2.35	34.65	27.69	52.02	1.87	65.24	65.48	0.420
2000	2.23	34.68	27.72	48.76	1.91	65.35	65.60	0.420
2100	2.13	34.68	27.73	47.81	1.96	65.28	65.55	0.420
2200	2.03	34.70	27.75	46.14	2.01	65.24	65.52	0.420
2300	1.96	34.74	27.79	42.78	2.05	65.21	65.50	0.420
2400	1.92	34.71	27.77	44.85	2.10	65.20	65.50	0.420
2500	1.87	34.72	27.78	43.49	2.14	65.21	65.52	0.420
2600	1.84	34.71	27.77	44.47	2.19	65.16	65.49	0.420
2700	1.81	34.72	27.79	43.44	2.23	65.14	65.49	0.420
2800	1.78	34.70	27.77	44.40	2.27	65.09	65.44	0.421
2900	1.77	34.71	27.78	44.02	2.32	65.04	65.41	0.430
3000	1.76	34.73	27.79	43.17	2.37	64.99	65.37	0.430
3100	1.76	34.71	27.78	44.78	2.42	64.96	65.36	0.430
3200	1.76	34.71	27.78	45.33	2.46	64.91	65.32	0.430
3300	1.76	34.71	27.78	45.50	2.51	64.83	65.25	0.430
3400	1.76	34.73	27.79	44.59	2.55	64.76	65.19	0.430
3500	1.74	34.71	27.78	45.61	2.60	64.80	65.25	0.430
3600	1.71	34.73	27.80	44.38	2.64	64.78	65.23	0.430
3700	1.70	34.72	27.79	45.37	2.69	64.79	65.26	0.430
3800	1.69	34.70	27.78	47.09	2.74	64.72	65.21	0.430
3866	1.70	34.68	27.76	48.60	2.77	64.57	65.06	0.430



## WELOC 77 STA 24 30-MAY-77 1622 IN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
10	15.90	34.67	25.53	246.72	0.03	30.38	30.38	1.198
20	15.41	34.68	25.66	234.88	0.05	53.07	53.07	0.630
30	15.14	34.59	25.64	236.57	0.07	58.64	58.64	0.532
40	14.83	34.67	25.78	224.31	0.09	60.34	60.35	0.507
50	14.55	34.65	25.82	220.61	0.12	60.83	60.84	0.500
60	13.96	34.58	25.90	213.50	0.14	61.09	61.09	0.490
70	13.46	34.68	26.07	196.88	0.17	61.31	61.32	0.490
80	13.18	34.68	26.12	192.37	0.18	61.73	61.74	0.480
90	12.94	34.79	26.27	178.93	0.20	62.22	62.23	0.471
100	12.91	34.79	26.27	179.08	0.22	62.35	62.37	0.470
110	12.89	34.79	26.27	179.20	0.24	62.65	62.67	0.470
120	12.83	34.76	26.26	179.76	0.25	62.98	63.00	0.460
130	12.77	34.81	26.31	176.25	0.27	63.03	63.05	0.460
140	12.73	34.79	26.30	176.73	0.29	62.84	62.85	0.470
150	12.64	34.78	26.31	176.20	0.31	62.56	62.58	0.470
160	12.57	34.80	26.34	173.62	0.32	62.34	62.37	0.470
170	12.52	34.78	26.34	173.79	0.34	62.49	62.51	0.470
180	12.42	34.76	26.35	173.93	0.36	62.93	62.95	0.460
190	12.33	34.78	26.38	171.04	0.37	62.99	63.01	0.460
200	12.22	34.75	26.37	171.39	0.39	63.24	63.27	0.460
210	12.13	34.73	26.38	171.34	0.41	63.40	63.43	0.460
220	11.98	34.72	26.40	169.58	0.43	63.51	63.54	0.450
230	11.81	34.72	26.43	167.09	0.44	63.72	63.75	0.450
240	11.65	34.77	26.49	161.05	0.46	64.23	64.26	0.440
250	11.58	34.76	26.50	159.90	0.47	64.35	64.38	0.440
260	11.49	34.77	26.52	158.48	0.49	64.03	64.06	0.449
270	11.43	34.70	26.48	162.60	0.50	64.17	64.20	0.447
280	11.28	34.70	26.52	159.59	0.52	64.67	64.70	0.440
290	11.16	34.71	26.54	157.41	0.54	64.64	64.68	0.440
300	10.99	34.68	26.55	156.32	0.55	64.90	64.94	0.430
310	10.84	34.70	26.59	152.72	0.57	64.99	65.02	0.430
320	10.75	34.68	26.59	153.06	0.58	64.94	64.98	0.430
330	10.60	34.68	26.62	150.22	0.60	65.00	65.04	0.430
340	10.50	34.67	26.63	149.72	0.62	65.03	65.07	0.430
350	10.34	34.66	26.65	147.88	0.63	65.10	65.14	0.430
360	10.18	34.66	26.68	145.57	0.65	65.07	65.12	0.430
370	10.05	34.69	26.72	141.53	0.66	65.13	65.17	0.430
380	9.96	34.70	26.74	139.90	0.67	65.07	65.11	0.430
390	9.86	34.54	26.63	150.00	0.69	65.17	65.22	0.430
400	9.73	34.67	26.76	138.32	0.70	65.16	65.21	0.430
410	9.60	34.63	26.76	138.84	0.72	65.11	65.16	0.430
420	9.47	34.61	26.76	138.91	0.73	65.10	65.15	0.430
430	9.26	34.63	26.81	134.18	0.74	65.13	65.19	0.430
440	9.12	34.56	26.78	136.37	0.76	65.07	65.12	0.430
450	8.87	34.52	26.78	136.27	0.77	65.02	65.07	0.430
460	8.64	34.46	26.78	137.04	0.78	65.03	65.09	0.430
470	8.32	34.47	26.83	131.39	0.80	64.97	65.02	0.430
480	8.09	34.50	26.89	125.92	0.81	64.80	64.86	0.430
490	7.89	34.51	26.93	121.74	0.82	64.77	64.83	0.430
500	7.76	34.51	26.95	120.32	0.83	64.78	64.84	0.430
600	6.33	34.43	27.08	107.53	0.95	65.12	65.19	0.430
700	5.89	34.49	27.18	98.86	1.05	65.21	65.30	0.430
800	5.01	34.44	27.25	91.67	1.15	65.22	65.32	0.430
882	4.47	34.51	27.37	81.14	1.22	65.16	65.28	0.430

## WELOC 77 STA 25B 30-MAY-77 1830 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	15.35	34.56	25.58	242.34	0.02	54.21	54.21	0.622
20	14.85	34.61	25.72	229.01	0.05	60.25	60.25	0.510
30	14.49	34.50	25.72	229.69	0.08	60.91	60.91	0.496
40	14.03	34.66	25.93	209.41	0.10	61.34	61.34	0.490
50	13.72	34.66	26.01	202.70	0.12	61.39	61.40	0.490
60	13.46	34.79	26.15	189.01	0.13	62.00	62.00	0.481
70	13.42	34.77	26.15	189.47	0.15	62.79	62.80	0.470
80	13.36	34.73	26.13	191.79	0.17	62.92	62.93	0.460
90	13.16	34.71	26.16	189.74	0.19	62.44	62.45	0.470
100	12.89	34.75	26.25	181.02	0.21	62.69	62.70	0.470
110	12.84	34.76	26.26	180.51	0.23	62.78	62.79	0.470
120	12.79	34.71	26.23	183.32	0.25	62.80	62.81	0.465
130	12.74	34.78	26.30	176.95	0.27	62.08	62.10	0.480
140	12.68	34.80	26.32	175.41	0.28	61.89	61.91	0.480
150	12.67	34.79	26.32	175.69	0.30	62.15	62.17	0.480
160	12.61	34.81	26.34	173.30	0.31	62.50	62.52	0.470
170	12.58	34.82	26.36	171.83	0.33	62.41	62.43	0.470
180	12.56	34.81	26.36	172.69	0.35	62.38	62.41	0.470
190	12.51	34.80	26.35	172.94	0.37	62.50	62.52	0.470
200	12.49	34.79	26.35	174.25	0.39	62.53	62.55	0.470
210	12.36	34.73	26.34	175.65	0.40	62.94	62.97	0.460
220	12.22	34.76	26.38	171.24	0.42	63.12	63.15	0.460
230	12.12	34.76	26.39	170.03	0.44	63.21	63.24	0.460
240	12.04	34.73	26.39	170.37	0.45	63.30	63.33	0.460
250	11.92	34.72	26.40	170.03	0.47	63.35	63.39	0.460
260	11.73	34.68	26.41	169.16	0.49	63.59	63.62	0.451
270	11.40	34.59	26.41	169.75	0.51	64.03	64.07	0.444
280	11.04	34.63	26.50	160.74	0.52	64.32	64.35	0.440
290	10.77	34.62	26.54	156.97	0.54	64.51	64.55	0.440
300	10.60	34.65	26.60	152.18	0.55	64.58	64.62	0.440
310	10.51	34.62	26.59	153.03	0.57	64.70	64.74	0.440
320	10.39	34.65	26.64	148.75	0.58	64.83	64.86	0.430
330	10.30	34.69	26.68	144.61	0.59	65.03	65.07	0.430
340	10.20	34.66	26.67	145.53	0.61	65.08	65.12	0.430
350	10.08	34.67	26.71	142.43	0.62	65.14	65.19	0.430
360	9.99	34.60	26.66	146.94	0.64	65.19	65.23	0.430
370	9.89	34.62	26.70	143.89	0.65	65.16	65.20	0.430
380	9.67	34.60	26.72	141.77	0.67	64.90	64.94	0.430
390	9.59	34.59	26.73	140.62	0.68	64.90	64.95	0.430
400	9.41	34.56	26.72	141.43	0.70	64.93	64.98	0.430
410	9.20	34.57	26.76	137.13	0.71	64.77	64.82	0.437
420	9.07	34.52	26.75	139.09	0.73	64.70	64.76	0.440
430	8.87	34.50	26.76	137.59	0.74	64.64	64.70	0.440
440	8.56	34.35	26.70	143.46	0.75	64.54	64.59	0.440
450	8.17	34.50	26.87	126.60	0.76	64.55	64.60	0.440
460	8.03	34.52	26.91	123.76	0.78	64.57	64.63	0.440
470	7.87	34.43	26.87	127.27	0.79	64.59	64.65	0.440
480	7.64	34.42	26.90	124.61	0.80	64.63	64.69	0.440
490	7.51	34.42	26.92	122.83	0.81	64.65	64.71	0.440
500	7.14	34.39	26.94	120.43	0.83	64.68	64.75	0.440
524	6.85	34.47	27.04	110.81	0.85	64.69	64.76	0.440



WELOC 77 STA 34 3-JUN-77 0140 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
10	17.59	34.59	25.07	290.12	0.03	40.35	40.35	0.916
20	15.80	34.86	25.71	230.16	0.06	55.27	55.27	0.597
30	15.37	35.02	25.93	209.52	0.08	59.91	59.91	0.511
40	15.11	34.91	25.90	213.17	0.09	62.40	62.40	0.476
50	14.90	34.92	25.94	208.45	0.11	63.01	63.02	0.460
60	14.67	34.87	25.96	207.38	0.14	63.47	63.48	0.451
70	14.39	34.84	26.01	203.38	0.16	63.99	64.00	0.450
80	14.01	34.82	26.06	198.07	0.18	64.29	64.30	0.442
90	13.76	34.89	26.17	187.99	0.20	64.59	64.60	0.440
100	13.65	34.85	26.16	188.76	0.22	63.80	63.82	0.452
110	13.45	34.78	26.14	190.72	0.23	60.18	60.20	0.510
120	13.18	34.86	26.28	179.21	0.26	61.03	61.04	0.495
130	13.05	34.85	26.29	177.70	0.27	61.52	61.54	0.485
140	12.91	34.84	26.30	176.69	0.29	62.73	62.75	0.466
150	12.83	34.86	26.33	174.06	0.30	62.95	62.97	0.460
160	12.73	34.84	26.34	173.39	0.32	63.08	63.10	0.460
170	12.65	34.88	26.39	169.64	0.34	63.24	63.26	0.460
180	12.56	34.83	26.36	171.64	0.36	63.23	63.25	0.460
190	12.43	34.83	26.40	169.36	0.37	63.28	63.30	0.460
200	12.36	34.85	26.43	166.65	0.40	63.42	63.45	0.460
210	12.23	34.81	26.42	167.18	0.41	63.55	63.57	0.451
220	12.07	34.78	26.43	166.86	0.42	63.09	63.12	0.460
230	11.90	34.80	26.47	162.81	0.44	63.00	63.03	0.460
240	11.76	34.85	26.54	156.84	0.46	63.62	63.65	0.450
250	11.69	34.83	26.53	157.47	0.48	64.15	64.18	0.444
260	11.57	34.79	26.53	158.36	0.49	63.96	63.99	0.449
270	11.48	34.78	26.54	157.25	0.50	63.08	63.12	0.460
280	11.34	34.75	26.54	157.30	0.52	63.47	63.50	0.455
290	11.16	34.72	26.55	156.04	0.54	61.91	61.95	0.477
300	11.07	34.75	26.59	152.83	0.55	60.74	60.78	0.500
310	11.01	34.73	26.59	153.54	0.57	61.06	61.10	0.496
320	10.90	34.71	26.59	153.03	0.58	61.43	61.47	0.490
330	10.74	34.64	26.57	155.72	0.60	61.43	61.48	0.490
340	10.46	34.67	26.64	149.39	0.61	61.09	61.13	0.490
350	10.27	34.69	26.69	144.74	0.63	61.00	61.05	0.490
360	10.12	34.64	26.67	146.34	0.64	61.10	61.15	0.490
370	9.88	34.65	26.73	141.27	0.66	61.03	61.08	0.490
380	9.76	34.65	26.74	139.60	0.67	61.09	61.14	0.490
390	9.60	34.65	26.77	136.97	0.68	61.15	61.21	0.490
400	9.53	34.62	26.75	138.85	0.70	61.25	61.31	0.490
410	9.36	34.51	26.70	144.16	0.72	62.10	62.16	0.475
420	8.92	34.52	26.78	135.70	0.73	63.94	63.99	0.443
430	8.69	34.55	26.84	130.67	0.74	64.58	64.64	0.440
440	8.58	34.59	26.89	125.88	0.75	64.63	64.68	0.440
450	8.41	34.61	26.92	122.29	0.76	64.61	64.66	0.440
460	8.35	34.66	26.97	118.24	0.78	64.01	64.06	0.445
470	8.28	34.56	26.91	124.50	0.79	64.26	64.32	0.445
480	8.14	34.61	26.97	118.82	0.80	64.56	64.62	0.440
490	8.00	34.53	26.93	122.46	0.81	64.70	64.76	0.440
500	7.84	34.50	26.93	122.25	0.83	64.73	64.79	0.440
600	6.99	34.56	27.09	107.78	0.94	64.21	64.29	0.440
700	6.18	34.52	27.17	100.42	1.04	64.35	64.44	0.440
800	5.17	34.52	27.30	88.75	1.14	64.70	64.81	0.435
900	4.77	34.53	27.35	83.32	1.22	64.87	64.99	0.430
1000	4.41	34.54	27.40	78.88	1.30	64.73	64.86	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	3.94	34.59	27.48	70.78	1.37	64.79	64.93	0.430
1200	3.61	34.66	27.58	62.21	1.44	64.79	64.94	0.430
1300	3.24	34.64	27.60	59.73	1.50	63.23	63.40	0.460
1400	3.01	34.63	27.61	58.67	1.56	61.44	61.63	0.482
1420	2.99	34.64	27.62	57.81	1.57	58.80	59.00	0.530

WELOC 77 STA 46 7-JUN-77 0705 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	18.86	35.16	25.20	278.45	0.03	42.66	42.66	0.850
20	18.28	34.87	25.12	285.75	0.06	47.25	47.25	0.750
30	17.71	35.07	25.41	258.19	0.09	51.44	51.44	0.667
40	17.41	34.83	25.31	269.20	0.11	56.66	56.66	0.568
50	16.31	34.78	25.53	248.08	0.13	61.71	61.72	0.487
60	15.67	35.02	25.86	217.53	0.16	62.63	62.64	0.470
70	15.26	34.94	25.89	214.60	0.18	62.50	62.51	0.470
80	14.95	35.01	26.01	203.11	0.20	62.63	62.64	0.470
90	14.89	35.02	26.03	201.73	0.22	62.73	62.74	0.470
100	14.79	35.00	26.03	201.65	0.24	62.61	62.63	0.470
110	14.75	35.02	26.06	199.45	0.26	62.48	62.49	0.470
120	14.74	34.99	26.05	200.92	0.28	62.73	62.74	0.470
130	14.67	34.99	26.06	200.30	0.30	62.44	62.46	0.470
140	14.63	35.00	26.07	199.31	0.32	61.75	61.77	0.480
150	14.55	34.99	26.08	198.45	0.34	60.19	60.21	0.504
160	14.47	34.97	26.09	198.36	0.36	58.05	58.07	0.547
170	14.38	34.99	26.11	195.49	0.38	54.88	54.91	0.603
180	14.27	34.99	26.14	193.70	0.40	53.16	53.19	0.630
190	14.20	34.97	26.14	194.37	0.42	53.63	53.66	0.620
200	14.08	34.93	26.13	194.86	0.44	54.21	54.24	0.610
210	14.00	34.97	26.18	190.74	0.46	54.23	54.26	0.610
218	13.95	34.91	26.14	193.94	0.47	54.31	54.34	0.610



WELDC 77 STA 47 7-JUN-77 0800 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	18.73	34.98	25.10	287.99	0.03	45.03	45.03	0.800
20	18.34	35.04	25.24	274.43	0.06	45.43	45.44	0.793
30	17.82	34.74	25.13	285.17	0.09	51.88	51.89	0.666
40	16.95	34.92	25.49	251.67	0.11	61.24	61.25	0.492
50	16.48	35.04	25.69	233.02	0.13	62.65	62.66	0.470
60	16.09	35.02	25.76	226.32	0.16	63.33	63.34	0.460
70	15.91	35.07	25.84	218.97	0.18	63.38	63.39	0.460
80	15.65	35.05	25.89	215.18	0.20	63.59	63.60	0.453
90	15.47	35.05	25.94	211.47	0.22	63.46	63.48	0.452
100	15.27	34.99	25.92	212.08	0.24	62.77	62.78	0.470
110	14.90	34.96	25.98	206.97	0.26	62.95	62.96	0.461
120	14.74	34.98	26.03	202.18	0.29	62.74	62.75	0.470
130	14.68	34.98	26.05	200.73	0.31	62.61	62.63	0.470
140	14.61	34.99	26.07	199.61	0.33	62.74	62.76	0.470
150	14.54	34.98	26.08	199.00	0.35	62.96	62.98	0.460
160	14.50	35.02	26.12	195.85	0.37	62.92	62.94	0.462
170	14.46	34.96	26.08	199.26	0.39	62.74	62.76	0.470
180	14.35	34.95	26.09	198.60	0.41	62.85	62.87	0.463
190	14.13	34.86	26.07	200.65	0.43	63.49	63.51	0.453
200	13.96	34.90	26.14	194.37	0.45	63.55	63.58	0.450
210	13.84	34.90	26.16	192.40	0.47	63.83	63.86	0.450
220	13.62	34.81	26.14	194.83	0.49	62.89	62.92	0.466
230	13.29	34.81	26.21	188.38	0.51	62.18	62.21	0.478
240	12.96	34.76	26.24	185.83	0.52	61.06	61.09	0.490
250	12.68	34.66	26.22	187.52	0.54	61.07	61.10	0.496
260	12.29	34.83	26.42	168.53	0.56	62.60	62.63	0.470
270	12.23	34.84	26.44	166.52	0.58	63.32	63.35	0.460
280	12.13	34.80	26.43	167.71	0.59	64.03	64.07	0.450
290	11.92	34.73	26.41	169.68	0.61	64.55	64.59	0.440
300	11.66	34.72	26.46	166.39	0.63	64.77	64.81	0.430
310	11.42	34.71	26.49	162.48	0.64	64.76	64.79	0.432
320	11.19	34.71	26.54	158.14	0.66	64.84	64.88	0.430
330	10.99	34.72	26.59	154.22	0.67	64.83	64.87	0.430
340	10.82	34.68	26.57	155.07	0.69	64.75	64.80	0.430
350	10.60	34.65	26.59	153.16	0.70	64.84	64.88	0.430
360	10.24	34.61	26.63	150.05	0.72	64.52	64.56	0.440
370	9.94	34.68	26.74	140.15	0.73	64.56	64.61	0.440
380	9.78	34.64	26.73	140.49	0.75	64.66	64.70	0.440
390	9.45	34.53	26.70	143.22	0.76	64.64	64.69	0.440
400	9.08	34.55	26.78	135.86	0.77	64.45	64.50	0.440
410	8.74	34.48	26.77	136.69	0.79	64.74	64.79	0.440
420	8.18	34.45	26.84	129.76	0.80	64.76	64.81	0.430
430	7.90	34.50	26.91	122.50	0.82	64.72	64.77	0.440
440	7.75	34.55	26.98	116.35	0.83	64.60	64.66	0.440
450	7.62	34.53	26.98	115.71	0.84	64.57	64.63	0.440
460	7.50	34.54	27.01	113.97	0.85	64.54	64.60	0.440
470	7.45	34.56	27.03	111.59	0.86	64.51	64.57	0.440
480	7.41	34.59	27.07	108.76	0.87	64.44	64.50	0.440
490	7.36	34.57	27.05	110.22	0.89	63.88	63.94	0.450
500	7.28	34.56	27.05	109.82	0.89	64.39	64.45	0.440
541	6.72	34.55	27.13	102.90	0.94	63.50	63.57	0.450

## WELOC 77 STA 48 7-JUN-77 0900 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	19.26	35.23	25.15	283.43	0.03	53.32	53.33	0.630
20	19.02	35.06	25.08	289.80	0.06	47.92	47.92	0.740
30	17.89	35.10	25.39	260.60	0.09	54.99	54.99	0.607
40	16.81	35.02	25.58	242.30	0.11	62.46	62.47	0.472
50	16.18	34.91	25.65	236.26	0.14	63.94	63.95	0.450
60	15.72	35.02	25.84	218.46	0.16	64.26	64.27	0.440
70	15.51	35.02	25.90	213.71	0.18	64.24	64.25	0.440
80	15.35	35.08	25.97	207.11	0.20	64.30	64.31	0.440
90	15.22	34.92	25.89	215.28	0.22	64.33	64.34	0.440
100	14.92	34.95	25.96	208.31	0.24	64.06	64.07	0.450
110	14.80	34.97	26.01	204.40	0.26	64.03	64.04	0.450
120	14.65	34.95	26.03	202.46	0.29	64.39	64.40	0.440
130	14.50	34.94	26.05	200.51	0.31	64.51	64.52	0.440
140	14.37	34.95	26.09	197.56	0.33	64.29	64.30	0.440
150	14.26	34.91	26.08	198.41	0.34	64.13	64.15	0.443
160	14.17	34.93	26.12	195.53	0.36	63.89	63.91	0.450
170	14.05	34.90	26.12	195.18	0.38	63.18	63.20	0.460
180	13.79	34.84	26.13	195.05	0.40	62.70	62.72	0.470
190	13.45	34.81	26.17	191.10	0.42	62.12	62.14	0.480
200	13.22	34.82	26.23	184.87	0.44	61.18	61.20	0.490
210	13.05	34.84	26.28	181.01	0.46	61.15	61.17	0.490
220	12.89	34.84	26.31	178.45	0.48	62.24	62.27	0.473
230	12.72	34.79	26.30	179.56	0.50	62.75	62.78	0.470
240	12.53	34.81	26.36	174.08	0.51	62.41	62.44	0.470
250	12.38	34.82	26.40	169.96	0.53	62.98	63.01	0.466
260	12.31	34.81	26.40	170.21	0.54	63.66	63.69	0.451
270	12.23	34.81	26.41	169.43	0.56	64.28	64.31	0.440
280	12.05	34.81	26.45	166.05	0.58	64.89	64.93	0.432
290	11.92	34.82	26.48	163.15	0.60	64.94	64.98	0.430
300	11.78	34.75	26.46	165.48	0.62	64.54	64.58	0.440
310	11.59	34.79	26.52	160.00	0.63	64.68	64.71	0.440
320	11.39	34.74	26.52	159.80	0.64	64.47	64.51	0.440
330	11.20	34.68	26.51	161.11	0.66	64.38	64.42	0.440
340	11.05	34.69	26.55	157.84	0.68	64.60	64.65	0.440
350	10.86	34.71	26.60	153.54	0.69	64.79	64.83	0.435
360	10.70	34.68	26.60	153.04	0.71	64.90	64.94	0.430
370	10.45	34.59	26.58	155.23	0.72	64.94	64.99	0.430
380	10.06	34.55	26.62	151.45	0.74	64.63	64.68	0.439
390	9.69	34.57	26.69	144.84	0.75	64.48	64.52	0.440
400	9.36	34.56	26.74	139.83	0.76	64.36	64.41	0.440
410	9.10	34.64	26.84	129.88	0.78	64.59	64.64	0.440
420	9.04	34.60	26.82	132.21	0.79	64.67	64.73	0.440
430	8.85	34.47	26.75	138.80	0.81	64.84	64.90	0.430
440	8.41	34.46	26.81	132.79	0.82	64.82	64.88	0.430
450	8.13	34.48	26.87	127.33	0.83	64.86	64.92	0.430
460	7.91	34.54	26.95	119.91	0.84	64.90	64.96	0.430
470	7.82	34.57	26.99	116.27	0.86	64.94	65.00	0.430
480	7.71	34.54	26.99	117.02	0.87	64.71	64.77	0.435
490	7.54	34.53	26.99	115.70	0.88	64.63	64.70	0.440
500	7.39	34.55	27.02	112.82	0.89	64.89	64.95	0.430
600	6.53	34.56	27.16	100.37	1.00	64.38	64.45	0.440
700	5.92	34.51	27.20	97.71	1.09	64.55	64.64	0.440
800	5.40	34.52	27.27	91.41	1.19	64.47	64.57	0.440
900	4.87	34.59	27.39	80.26	1.28	63.98	64.09	0.446
1000	4.58	34.56	27.39	80.21	1.36	64.00	64.13	0.448

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
1100	4.14	34.55	27.44	75.64	1.44	63.56	63.71	0.450
1126	4.01	34.54	27.45	74.87	1.46	63.22	63.37	0.460
1152	3.88	34.53	27.46	74.10	1.48	62.93	63.08	0.470
1178	3.75	34.52	27.47	73.33	1.50	62.64	62.83	0.480
1204	3.62	34.51	27.48	72.56	1.52	62.35	62.54	0.490
1230	3.49	34.50	27.49	71.79	1.54	62.06	62.25	0.500
1256	3.36	34.49	27.50	71.02	1.56	61.77	61.96	0.510
1282	3.23	34.48	27.51	70.25	1.58	61.48	61.67	0.520
1308	3.10	34.47	27.52	69.48	1.60	61.19	61.38	0.530
1334	2.97	34.46	27.53	68.71	1.62	60.90	61.09	0.540
1360	2.84	34.45	27.54	67.94	1.64	60.61	60.80	0.550
1386	2.71	34.44	27.55	67.17	1.66	60.32	60.51	0.560
1412	2.58	34.43	27.56	66.40	1.68	60.03	60.22	0.570
1438	2.45	34.42	27.57	65.63	1.70	59.74	59.93	0.580
1464	2.32	34.41	27.58	64.86	1.72	59.45	59.64	0.590
1490	2.19	34.40	27.59	64.09	1.74	59.16	59.35	0.600
1516	2.06	34.39	27.60	63.32	1.76	58.87	59.06	0.610
1542	1.93	34.38	27.61	62.55	1.78	58.58	58.77	0.620
1568	1.80	34.37	27.62	61.78	1.80	58.29	58.48	0.630
1594	1.67	34.36	27.63	61.01	1.82	58.00	58.19	0.640
1620	1.54	34.35	27.64	60.24	1.84	57.71	57.90	0.650
1646	1.41	34.34	27.65	59.47	1.86	57.42	57.61	0.660
1672	1.28	34.33	27.66	58.70	1.88	57.13	57.32	0.670
1698	1.15	34.32	27.67	57.93	1.90	56.84	57.03	0.680
1724	1.02	34.31	27.68	57.16	1.92	56.55	56.74	0.690
1750	0.89	34.30	27.69	56.39	1.94	56.26	56.45	0.700
1776	0.76	34.29	27.70	55.62	1.96	55.97	56.16	0.710
1802	0.63	34.28	27.71	54.85	1.98	55.68	55.87	0.720
1828	0.50	34.27	27.72	54.08	2.00	55.39	55.58	0.730
1854	0.37	34.26	27.73	53.31	2.02	55.10	55.29	0.740
1880	0.24	34.25	27.74	52.54	2.04	54.81	55.00	0.750
1906	0.11	34.24	27.75	51.77	2.06	54.52	54.71	0.760
1932	0.00	34.23	27.76	51.00	2.08	54.23	54.42	0.770
1958	-0.13	34.22	27.77	50.23	2.10	53.94	54.13	0.780
1984	-0.26	34.21	27.78	49.46	2.12	53.65	53.84	0.790
2010	-0.39	34.20	27.79	48.69	2.14	53.36	53.55	0.800
2036	-0.52	34.19	27.80	47.92	2.16	53.07	53.26	0.810
2062	-0.65	34.18	27.81	47.15	2.18	52.78	52.97	0.820
2088	-0.78	34.17	27.82	46.38	2.20	52.49	52.68	0.830
2114	-0.91	34.16	27.83	45.61	2.22	52.20	52.39	0.840
2140	-1.04	34.15	27.84	44.84	2.24	51.91	52.10	0.850
2166	-1.17	34.14	27.85	44.07	2.26	51.62	51.81	0.860
2192	-1.30	34.13	27.86	43.30	2.28	51.33	51.52	0.870
2218	-1.43	34.12	27.87	42.53	2.30	51.04	51.23	0.880
2244	-1.56	34.11	27.88	41.76	2.32	50.75	50.94	0.890
2270	-1.69	34.10	27.89	40.99	2.34	50.46	50.65	0.900
2296	-1.82	34.09	27.90	40.22	2.36	50.17	50.36	0.910
2322	-1.95	34.08	27.91	39.45	2.38	49.88	50.07	0.920
2348	-2.08	34.07	27.92	38.68	2.40	49.59	49.78	0.930
2374	-2.21	34.06	27.93	37.91	2.42	49.30	49.49	0.940
2400	-2.34	34.05	27.94	37.14	2.44	49.01	49.20	0.950
2426	-2.47	34.04	27.95	36.37	2.46	48.72	48.91	0.960
2452	-2.60	34.03	27.96	35.60	2.48	48.43	48.62	0.970
2478	-2.73	34.02	27.97	34.83	2.50	48.14	48.33	0.980
2504	-2.86	34.01	27.98	34.06	2.52	47.85	48.04	0.990
2530	-2.99	34.00	27.99	33.29	2.54	47.56	47.75	1.000



## WELOC 77 STA 49 7-JUN-79 1030 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	19.84	35.19	24.96	300.62	0.03	55.25	55.25	0.590
20	19.10	35.18	25.16	282.72	0.06	53.45	53.45	0.630
30	18.50	35.14	25.28	271.98	0.09	53.42	53.42	0.631
40	17.81	35.03	25.35	264.33	0.11	58.81	58.81	0.536
50	16.79	34.68	25.34	266.33	0.14	62.54	62.55	0.470
60	15.86	34.87	25.71	232.01	0.16	63.60	63.60	0.457
70	15.39	34.91	25.84	219.27	0.19	64.18	64.19	0.440
80	15.18	34.95	25.91	212.70	0.21	64.41	64.42	0.440
90	14.95	34.95	25.96	207.87	0.23	64.44	64.45	0.440
100	14.83	34.96	26.00	204.43	0.25	64.43	64.44	0.440
110	14.76	34.98	26.03	202.47	0.27	64.49	64.51	0.440
120	14.69	34.96	26.03	202.69	0.30	64.67	64.68	0.440
130	14.58	34.90	26.01	204.60	0.31	64.66	64.67	0.440
140	14.40	34.90	26.05	201.61	0.33	64.66	64.68	0.440
150	14.27	34.96	26.12	195.43	0.35	64.52	64.54	0.440
160	14.13	34.93	26.12	195.04	0.38	63.76	63.78	0.450
170	14.00	34.89	26.13	194.50	0.39	63.15	63.17	0.460
180	13.89	34.91	26.16	192.11	0.41	62.58	62.60	0.470
190	13.73	34.84	26.14	193.58	0.43	62.09	62.11	0.480
200	13.59	34.89	26.21	187.71	0.45	61.64	61.66	0.487
210	13.41	34.84	26.20	188.39	0.47	61.35	61.38	0.490
220	13.10	34.81	26.24	184.45	0.49	61.55	61.58	0.485
230	12.92	34.82	26.29	180.63	0.51	62.56	62.59	0.470
240	12.74	34.74	26.26	183.38	0.52	62.40	62.43	0.470
250	12.50	34.76	26.33	177.16	0.54	62.37	62.40	0.470
260	12.35	34.76	26.36	174.84	0.56	62.54	62.57	0.470
270	12.19	34.78	26.40	170.44	0.57	62.62	62.66	0.470
280	12.05	34.76	26.41	169.97	0.59	62.71	62.75	0.468
290	11.87	34.77	26.45	165.82	0.61	63.23	63.27	0.460
300	11.71	34.70	26.43	168.32	0.62	63.48	63.52	0.458
310	11.46	34.73	26.50	161.92	0.64	64.01	64.04	0.448
320	11.34	34.74	26.53	159.21	0.66	64.66	64.70	0.440
330	11.11	34.72	26.56	156.81	0.67	64.68	64.72	0.440
340	10.93	34.70	26.58	155.20	0.69	64.52	64.56	0.440
350	10.71	34.69	26.61	151.86	0.71	64.43	64.48	0.440
360	10.54	34.65	26.61	152.18	0.72	64.18	64.23	0.440
370	10.35	34.62	26.62	151.52	0.74	64.36	64.40	0.440
380	10.14	34.62	26.65	148.05	0.75	64.39	64.44	0.440
390	9.84	34.61	26.70	143.82	0.76	64.73	64.78	0.437
400	9.64	34.60	26.71	142.28	0.78	64.59	64.64	0.440
410	9.27	34.49	26.70	143.87	0.79	64.10	64.15	0.447
420	9.04	34.65	26.86	128.93	0.81	63.91	63.96	0.450
430	9.02	34.63	26.85	130.29	0.82	63.95	64.01	0.450
440	8.92	34.56	26.80	134.06	0.83	64.14	64.20	0.444
450	8.60	34.47	26.79	135.44	0.85	64.55	64.61	0.440
460	8.26	34.53	26.88	126.52	0.86	64.66	64.72	0.440
470	8.12	34.59	26.95	119.92	0.87	64.65	64.71	0.440
480	8.07	34.59	26.97	118.79	0.88	64.72	64.78	0.440
490	7.87	34.48	26.90	124.01	0.89	64.79	64.85	0.430
500	7.67	34.55	27.00	116.12	0.91	64.81	64.87	0.430
600	6.71	34.52	27.10	106.20	1.02	64.81	64.88	0.430
700	5.96	34.53	27.21	96.51	1.12	64.62	64.71	0.440
800	5.43	34.53	27.27	90.92	1.21	64.76	64.86	0.430
900	4.97	34.53	27.34	85.33	1.30	64.75	64.87	0.430
1000	4.61	34.56	27.39	80.51	1.38	64.78	64.91	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	4.23	34.52	27.40	78.88	1.46	64.38	64.52	0.440
1200	3.83	34.57	27.48	71.49	1.54	64.35	64.50	0.440
1300	3.41	34.68	27.61	59.37	1.60	64.21	64.37	0.440
1400	3.01	34.62	27.61	59.10	1.66	64.25	64.43	0.440
1500	2.75	34.64	27.64	55.57	1.72	63.98	64.18	0.440
1600	2.65	34.64	27.65	55.28	1.78	63.84	64.05	0.450
1700	2.52	34.64	27.66	54.06	1.83	63.11	63.33	0.460
1731	2.48	34.63	27.66	54.19	1.84	62.38	62.62	0.470

## WELOC 77 STA 50 7-JUN-79 1130 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	20.92	35.19	24.67	328.08	0.03	53.94	53.94	0.620
20	19.40	35.11	25.02	295.93	0.07	53.86	53.86	0.620
30	19.08	35.14	25.13	285.81	0.10	54.67	54.67	0.606
40	18.49	34.80	25.02	296.89	0.12	59.34	59.35	0.525
50	16.79	34.74	25.38	262.54	0.15	62.79	62.80	0.463
60	16.08	34.86	25.64	237.77	0.18	63.48	63.49	0.452
70	15.67	34.93	25.79	223.98	0.20	64.03	64.04	0.450
80	15.35	34.97	25.90	214.26	0.22	64.31	64.32	0.440
90	15.14	34.90	25.88	215.59	0.24	64.41	64.42	0.440
100	14.92	34.93	25.96	208.66	0.26	64.47	64.48	0.440
110	14.76	34.90	25.96	208.07	0.28	64.45	64.46	0.440
120	14.58	34.90	26.01	204.31	0.30	64.55	64.56	0.440
130	14.44	34.93	26.06	199.99	0.33	64.67	64.69	0.440
140	14.33	34.94	26.10	197.15	0.35	64.59	64.61	0.440
150	14.20	34.87	26.06	200.07	0.36	63.84	63.86	0.450
160	14.01	34.89	26.12	195.38	0.38	63.59	63.61	0.450
170	13.83	34.83	26.11	196.09	0.40	62.40	62.42	0.470
180	13.64	34.82	26.15	193.21	0.42	61.67	61.70	0.480
190	13.51	34.88	26.21	186.84	0.44	61.33	61.35	0.490
200	13.39	34.82	26.20	188.53	0.46	61.12	61.15	0.490
210	13.23	35.07	26.42	167.55	0.48	60.89	60.92	0.500
220	13.09	34.83	26.26	183.20	0.50	60.78	60.81	0.500
230	12.93	34.83	26.29	179.85	0.51	61.19	61.22	0.490
240	12.78	34.83	26.33	176.86	0.53	61.36	61.39	0.490
250	12.66	34.76	26.30	179.95	0.55	62.07	62.11	0.481
260	12.46	34.75	26.33	177.14	0.57	62.61	62.64	0.470
270	12.28	34.81	26.41	169.84	0.59	62.66	62.70	0.470
280	12.14	34.78	26.42	169.87	0.60	62.68	62.72	0.470
290	11.95	34.70	26.39	171.98	0.62	62.78	62.82	0.467
300	11.78	34.80	26.50	162.31	0.63	63.28	63.32	0.460
310	11.66	34.79	26.51	161.24	0.65	63.41	63.45	0.460
320	11.55	34.72	26.47	164.57	0.67	63.74	63.78	0.450
330	11.31	34.66	26.48	164.50	0.68	63.68	63.72	0.450
340	11.09	34.71	26.55	157.38	0.70	63.79	63.83	0.450
350	10.94	34.67	26.55	157.51	0.71	64.40	64.44	0.440
360	10.79	34.69	26.60	153.58	0.73	64.68	64.72	0.440
370	10.60	34.61	26.57	156.32	0.74	64.54	64.59	0.440
380	10.33	34.64	26.63	149.95	0.76	64.61	64.66	0.440
390	10.13	34.62	26.66	147.55	0.78	64.68	64.72	0.440
400	9.85	34.57	26.67	147.02	0.79	64.75	64.80	0.432
410	9.59	34.57	26.71	143.48	0.81	64.83	64.88	0.430
420	9.30	34.55	26.73	140.52	0.82	64.82	64.87	0.430
430	9.08	34.56	26.78	136.51	0.84	64.81	64.86	0.430
440	8.88	34.55	26.80	134.73	0.84	64.78	64.84	0.431
450	8.64	34.56	26.85	129.50	0.86	64.77	64.83	0.440
460	8.39	34.51	26.85	129.89	0.87	64.78	64.84	0.430
470	8.13	34.51	26.89	126.13	0.88	64.75	64.81	0.430
480	7.94	34.54	26.95	120.57	0.90	64.77	64.83	0.430
490	7.81	34.55	26.97	117.60	0.91	64.80	64.86	0.430
500	7.73	34.51	26.96	120.03	0.92	64.76	64.83	0.430
600	6.80	34.55	27.11	105.19	1.03	64.73	64.81	0.435
700	6.03	34.53	27.21	97.41	1.14	64.65	64.74	0.440
800	5.36	34.53	27.29	89.70	1.23	64.74	64.85	0.430
900	4.92	34.50	27.31	87.75	1.31	64.86	64.98	0.430
1000	4.49	34.55	27.41	79.12	1.39	64.80	64.93	0.430



DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
1100	4.11	34.56	27.44	75.21	1.48	64.78	64.92	0.430
1200	3.77	34.57	27.49	70.90	1.55	64.59	64.74	0.440
1300	3.42	34.61	27.56	64.20	1.61	64.80	64.96	0.430
1400	3.08	34.62	27.60	60.34	1.68	64.85	65.02	0.430
1500	2.91	34.63	27.62	57.77	1.74	64.66	64.86	0.430
1600	2.67	34.66	27.67	53.31	1.79	64.34	64.55	0.440
1700	2.52	34.65	27.67	52.76	1.85	64.07	64.30	0.440
1800	2.42	34.17	27.30	87.49	1.91	64.20	64.44	0.440
1900	2.28	34.67	27.71	49.64	1.96	63.59	63.84	0.450
2000	2.22	34.69	27.73	48.10	2.00	63.24	63.50	0.451
2100	2.21	34.68	27.72	48.94	2.05	63.22	63.50	0.460
2130	2.19	34.69	27.73	48.34	2.07	63.21	63.49	0.450

## WELOC 77 STA 51 7-JUN-77 1315 UP CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
3087	1.77	34.67	27.75	47.68	2.41	64.25	64.65	0.440
3000	1.78	34.69	27.77	45.65	2.37	64.15	64.54	0.440
2900	1.78	34.70	27.77	44.93	2.33	64.11	64.49	0.440
2800	1.80	34.68	27.76	45.98	2.28	64.10	64.46	0.440
2700	1.83	34.71	27.77	44.74	2.24	64.13	64.48	0.440
2600	1.88	34.67	27.74	47.65	2.19	64.15	64.48	0.440
2500	1.96	34.66	27.72	49.25	2.14	64.18	64.50	0.440
2400	1.99	34.68	27.74	47.69	2.09	63.92	64.23	0.440
2300	2.05	34.65	27.71	49.75	2.04	64.04	64.34	0.440
2200	2.11	34.66	27.71	49.35	1.99	63.99	64.28	0.440
2100	2.19	34.64	27.70	51.36	1.94	64.30	64.57	0.440
2000	2.26	34.65	27.70	51.22	1.89	64.30	64.56	0.440
1900	2.33	34.63	27.67	52.92	1.84	64.15	64.40	0.440
1800	2.42	34.63	27.67	53.62	1.78	64.44	64.67	0.440
1700	2.51	34.61	27.64	55.95	1.73	64.50	64.72	0.440
1600	2.65	34.59	27.62	58.42	1.67	64.59	64.79	0.434
1500	2.86	34.60	27.60	59.81	1.61	64.65	64.84	0.430
1400	3.09	34.58	27.57	63.17	1.55	64.99	65.17	0.430
1300	3.33	34.57	27.54	65.90	1.48	64.96	65.13	0.430
1200	3.70	34.53	27.46	73.40	1.41	65.04	65.19	0.430
1100	4.10	34.51	27.41	78.19	1.34	64.94	65.08	0.430
1000	4.53	34.51	27.36	83.45	1.26	64.95	65.08	0.430
900	4.90	34.51	27.32	86.53	1.17	65.05	65.16	0.430
800	5.40	34.51	27.26	91.65	1.09	65.13	65.23	0.430
700	5.97	34.55	27.22	95.37	0.99	65.14	65.23	0.430
600	6.65	34.53	27.13	104.24	0.89	65.32	65.40	0.430
500	7.72	34.61	27.03	112.67	0.79	65.16	65.22	0.430
490	7.86	34.62	27.01	113.98	0.77	65.16	65.22	0.430
480	7.97	34.64	27.01	114.36	0.76	65.16	65.22	0.430
470	8.08	34.65	27.01	114.66	0.75	65.17	65.23	0.430
460	8.23	34.65	26.99	116.29	0.74	65.21	65.27	0.430
450	8.38	34.66	26.97	118.05	0.73	65.25	65.30	0.430
440	8.51	34.67	26.96	119.05	0.71	65.27	65.32	0.430
430	8.67	34.68	26.94	120.81	0.70	65.24	65.29	0.430
420	8.86	34.68	26.91	123.57	0.69	65.19	65.25	0.430
410	9.06	34.68	26.87	126.44	0.67	65.03	65.09	0.430
400	9.22	34.69	26.86	128.36	0.66	64.90	64.95	0.430
390	9.39	34.70	26.84	130.06	0.65	64.90	64.95	0.430
380	9.58	34.72	26.83	131.13	0.64	64.96	65.01	0.430
370	9.80	34.76	26.82	132.15	0.63	65.02	65.07	0.430
360	10.08	34.78	26.79	134.87	0.61	65.09	65.14	0.430
350	10.33	34.79	26.75	138.26	0.60	65.09	65.14	0.430
340	10.55	34.81	26.72	140.83	0.58	64.94	64.98	0.433
330	10.76	34.82	26.70	143.05	0.57	64.63	64.67	0.440
320	10.95	34.83	26.66	145.95	0.55	64.43	64.47	0.440
310	11.15	34.81	26.62	150.01	0.54	64.43	64.47	0.440
300	11.31	34.80	26.59	153.36	0.52	64.34	64.38	0.440
290	11.45	34.80	26.56	155.44	0.51	64.22	64.26	0.441
280	11.58	34.83	26.56	155.77	0.49	64.01	64.05	0.450
270	11.71	34.86	26.56	155.40	0.47	63.70	63.74	0.450
260	11.89	34.88	26.54	157.01	0.46	63.50	63.54	0.458
250	12.09	34.89	26.50	160.26	0.45	63.37	63.40	0.460
240	12.27	34.90	26.48	162.89	0.43	63.10	63.13	0.460
230	12.44	34.91	26.45	165.03	0.42	62.67	62.70	0.465
220	12.61	34.92	26.43	167.29	0.40	62.04	62.07	0.480

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
210	12.81	34.91	26.38	171.19	0.38	61.50	61.52	0.490
200	12.97	34.91	26.34	174.46	0.36	61.40	61.42	0.490
190	13.10	34.92	26.33	175.58	0.34	61.45	61.47	0.490
180	13.23	34.96	26.33	175.35	0.32	61.61	61.63	0.481
170	13.36	34.99	26.33	175.15	0.31	61.91	61.93	0.480
160	13.52	35.02	26.32	176.07	0.29	62.40	62.42	0.474
150	13.72	35.03	26.28	179.02	0.27	63.04	63.06	0.465
140	13.93	35.01	26.23	183.59	0.25	63.68	63.70	0.455
130	14.12	35.01	26.19	187.58	0.24	64.26	64.27	0.445
120	14.30	35.01	26.15	190.85	0.22	64.79	64.81	0.435
110	14.45	35.00	26.11	194.68	0.20	65.10	65.12	0.430
100	14.59	34.98	26.07	198.49	0.18	65.11	65.12	0.430
90	14.74	34.98	26.04	200.96	0.16	65.00	65.01	0.430
80	14.91	35.00	26.01	203.18	0.14	64.98	64.99	0.430
70	15.11	35.02	25.98	205.76	0.11	64.98	64.99	0.430
60	15.40	35.08	25.97	206.88	0.09	64.77	64.78	0.434
50	15.82	35.21	25.97	206.32	0.07	64.25	64.26	0.444
40	16.58	35.41	25.95	208.56	0.05	63.05	63.06	0.461
30	17.87	35.58	25.76	225.66	0.04	60.71	60.72	0.498
20	19.38	35.57	25.38	261.63	0.03	57.69	57.69	0.550
10	20.57	35.50	25.01	296.19	0.03	54.91	54.92	0.603
3	21.14	35.50	24.86	310.59	0.04	53.38	53.38	0.630



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DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
4212	1.75	34.64	27.72	53.13	2.90	62.41	62.97	0.460
4200	1.75	34.63	27.72	54.07	2.90	62.82	63.37	0.458
4100	1.75	34.59	27.68	56.47	2.84	63.41	63.94	0.450
4000	1.77	34.60	27.69	55.71	2.79	63.49	64.01	0.450
3900	1.78	34.59	27.68	56.35	2.73	63.82	64.32	0.440
3800	1.79	34.58	27.68	56.65	2.68	64.04	64.53	0.440
3700	1.79	34.57	27.67	56.97	2.62	64.10	64.58	0.440
3600	1.78	34.60	27.69	54.96	2.56	64.08	64.54	0.440
3500	1.78	34.55	27.65	58.13	2.51	64.05	64.50	0.440
3400	1.78	34.56	27.66	56.75	2.45	64.13	64.57	0.440
3300	1.78	34.56	27.66	56.29	2.39	64.28	64.70	0.440
3200	1.78	34.56	27.65	56.40	2.33	64.31	64.72	0.440
3100	1.77	34.55	27.65	56.24	2.28	64.35	64.75	0.440
3000	1.78	34.54	27.64	57.02	2.22	64.22	64.61	0.440
2900	1.78	34.53	27.63	57.42	2.17	64.21	64.58	0.440
2800	1.79	34.54	27.64	56.82	2.11	64.22	64.58	0.440
2700	1.83	34.52	27.62	57.78	2.05	64.27	64.61	0.440
2600	1.87	34.50	27.60	59.50	1.99	64.21	64.55	0.440
2500	1.92	34.53	27.62	58.07	1.94	64.13	64.45	0.440
2400	1.99	34.51	27.61	59.31	1.88	63.98	64.30	0.440
2300	2.03	34.48	27.57	62.27	1.82	64.07	64.37	0.440
2200	2.11	34.50	27.59	61.15	1.76	64.14	64.43	0.440
2100	2.20	34.51	27.58	61.52	1.69	63.87	64.15	0.447
2000	2.26	34.46	27.54	65.17	1.63	64.11	64.37	0.440
1900	2.34	34.48	27.55	64.71	1.56	64.22	64.46	0.440
1800	2.44	34.44	27.52	67.57	1.50	64.31	64.55	0.440
1700	2.55	34.44	27.50	68.77	1.43	64.16	64.38	0.440
1600	2.67	34.42	27.47	71.36	1.36	64.22	64.43	0.440
1500	2.85	34.46	27.49	69.81	1.29	64.55	64.74	0.440
1400	3.09	34.41	27.43	75.80	1.22	64.60	64.78	0.440
1300	3.35	34.44	27.43	76.09	1.14	64.76	64.93	0.430
1200	3.66	34.39	27.37	82.24	1.06	64.65	64.80	0.440
1100	4.02	34.36	27.30	88.62	0.98	64.80	64.94	0.430
1000	4.41	34.40	27.29	89.18	0.89	64.73	64.86	0.430
900	4.91	34.40	27.24	94.03	0.80	64.85	64.97	0.430
800	5.46	34.38	27.16	101.85	0.70	64.79	64.89	0.430
700	6.01	34.44	27.13	104.37	0.59	64.85	64.93	0.430
600	6.70	34.40	27.01	114.98	0.48	65.03	65.10	0.430
500	7.66	34.49	26.95	120.46	0.37	64.91	64.97	0.430
490	7.79	34.51	26.94	120.86	0.35	64.87	64.93	0.430
480	7.93	34.51	26.93	122.39	0.34	64.86	64.92	0.430
470	8.08	34.53	26.92	123.33	0.33	64.86	64.92	0.430
460	8.24	34.54	26.91	124.90	0.32	64.89	64.95	0.430
450	8.39	34.53	26.87	127.75	0.30	64.92	64.97	0.430
440	8.56	34.53	26.84	130.01	0.29	64.94	65.00	0.430
430	8.76	34.54	26.82	132.15	0.27	64.96	65.02	0.430
420	8.95	34.56	26.80	133.53	0.26	64.92	64.97	0.430
410	9.14	34.59	26.79	134.57	0.25	64.80	64.85	0.430
400	9.38	34.62	26.78	136.58	0.23	64.71	64.76	0.438
390	9.62	34.64	26.76	138.15	0.22	64.76	64.81	0.433
380	9.87	34.67	26.74	139.87	0.21	64.83	64.87	0.430
370	10.12	34.69	26.71	142.40	0.20	64.76	64.80	0.436
360	10.35	34.69	26.67	146.44	0.18	64.53	64.57	0.440
350	10.53	34.66	26.62	150.82	0.16	64.19	64.23	0.444
340	10.66	34.66	26.59	153.52	0.15	64.02	64.06	0.447
330	10.80	34.67	26.58	154.55	0.13	64.15	64.19	0.440

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
310	11.11	34.69	26.53	158.71	0.10	64.22	64.26	0.440
300	11.27	34.71	26.52	159.93	0.08	64.06	64.10	0.445
290	11.44	34.75	26.51	160.25	0.06	63.86	63.90	0.450
280	11.61	34.78	26.51	160.31	0.05	63.69	63.73	0.450
270	11.85	34.79	26.48	163.71	0.04	63.67	63.71	0.451
260	12.05	34.76	26.42	168.66	0.02	63.33	63.37	0.459
250	12.22	34.75	26.38	172.56	0.01	62.18	62.21	0.477
240	12.33	34.75	26.36	174.50	0.02	61.37	61.40	0.487
230	12.46	34.76	26.34	175.80	0.03	61.07	61.10	0.490
220	12.60	34.79	26.33	176.16	0.05	61.06	61.09	0.490
210	12.75	34.83	26.32	176.29	0.07	61.08	61.11	0.490
200	12.93	34.83	26.30	178.99	0.09	61.07	61.10	0.490
190	13.08	34.82	26.26	182.72	0.11	61.14	61.16	0.490
180	13.22	34.83	26.24	184.40	0.13	61.33	61.36	0.490
170	13.36	34.86	26.24	184.12	0.15	61.68	61.71	0.487
160	13.49	34.89	26.23	184.73	0.16	62.11	62.13	0.479
150	13.67	34.88	26.18	188.89	0.18	62.95	62.97	0.460
140	13.83	34.85	26.13	193.64	0.20	63.76	63.78	0.450
130	13.99	34.86	26.10	196.32	0.22	64.22	64.23	0.440
120	14.15	34.88	26.08	197.44	0.24	64.58	64.59	0.440
110	14.31	34.89	26.06	199.60	0.26	64.85	64.86	0.430
100	14.44	34.91	26.04	200.74	0.28	64.83	64.84	0.430
90	14.62	34.94	26.03	201.68	0.30	64.70	64.71	0.438
80	14.83	34.97	26.01	203.61	0.33	64.56	64.57	0.440
70	15.01	34.99	25.99	205.38	0.35	64.53	64.54	0.440
60	15.22	35.02	25.96	207.73	0.37	64.52	64.53	0.440
50	15.55	35.05	25.91	212.20	0.38	64.36	64.37	0.442
40	15.89	35.10	25.87	215.92	0.40	63.88	63.89	0.450
30	16.42	35.21	25.83	218.62	0.43	63.40	63.41	0.460
20	17.42	35.71	25.98	204.61	0.45	62.24	62.25	0.480
10	18.40	36.47	26.31	172.59	0.47	60.15	60.15	0.514
8	18.58	36.61	26.37	166.83	0.47	59.77	59.77	0.520



## WELOC 77 STA 53 7-JUN-77 1815 UP CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
6261	2.01	34.50	27.59	73.52	4.72	55.55	56.44	0.520
6200	2.00	34.48	27.58	74.90	4.67	62.13	62.94	0.460
6100	1.99	34.45	27.55	76.24	4.60	62.30	63.09	0.460
6000	1.98	34.44	27.55	76.11	4.52	62.41	63.19	0.460
5900	1.96	34.44	27.55	75.47	4.45	62.46	63.22	0.460
5800	1.95	34.45	27.56	74.85	4.37	62.54	63.29	0.460
5700	1.93	34.41	27.53	76.49	4.30	62.62	63.36	0.460
5600	1.92	34.42	27.53	75.71	4.22	62.70	63.42	0.460
5500	1.91	34.41	27.53	75.28	4.14	62.76	63.47	0.460
5400	1.90	34.42	27.54	74.81	4.07	62.81	63.50	0.452
5300	1.88	34.40	27.52	75.18	3.99	62.84	63.53	0.450
5200	1.88	34.41	27.53	74.51	3.92	62.87	63.55	0.450
5100	1.86	34.41	27.54	73.57	3.85	62.88	63.55	0.450
5000	1.85	34.44	27.56	70.90	3.77	62.99	63.64	0.450
4900	1.84	34.42	27.54	72.15	3.70	63.13	63.77	0.450
4800	1.83	34.40	27.53	73.27	3.63	63.09	63.71	0.450
4700	1.82	34.40	27.52	72.91	3.55	63.12	63.73	0.450
4600	1.82	34.38	27.52	73.40	3.48	63.18	63.78	0.450
4500	1.82	34.36	27.49	74.80	3.40	63.24	63.83	0.450
4400	1.82	34.36	27.50	74.08	3.33	63.37	63.94	0.450
4300	1.82	34.40	27.53	71.57	3.26	63.40	63.96	0.450
4200	1.82	34.37	27.50	73.53	3.19	63.46	64.01	0.450
4100	1.82	34.38	27.51	72.67	3.11	63.57	64.10	0.450
4000	1.83	34.36	27.50	73.54	3.04	63.62	64.14	0.450
3900	1.83	34.36	27.50	73.12	2.97	63.33	63.84	0.450
3800	1.83	34.36	27.50	72.70	2.90	63.50	63.99	0.450
3700	1.83	34.35	27.49	73.55	2.82	63.68	64.16	0.440
3600	1.83	34.36	27.49	72.49	2.75	63.73	64.19	0.440
3500	1.83	34.33	27.47	73.96	2.68	63.74	64.19	0.440
3400	1.82	34.34	27.48	73.35	2.60	63.75	64.19	0.440
3300	1.83	34.33	27.47	73.51	2.53	63.89	64.32	0.440
3200	1.83	34.34	27.48	72.63	2.46	63.94	64.36	0.440
3100	1.83	34.34	27.48	72.02	2.39	64.02	64.42	0.440
3000	1.83	34.33	27.47	72.72	2.31	64.04	64.43	0.440
2900	1.83	34.32	27.47	72.97	2.24	64.06	64.43	0.440
2800	1.84	34.34	27.47	71.58	2.16	64.06	64.42	0.440
2700	1.86	34.34	27.47	71.84	2.10	64.05	64.40	0.440
2600	1.90	34.32	27.46	73.19	2.03	64.09	64.42	0.440
2500	1.96	34.34	27.46	72.37	1.95	64.12	64.44	0.440
2400	2.02	34.29	27.43	75.50	1.88	64.05	64.37	0.440
2300	2.10	34.33	27.45	74.32	1.80	63.94	64.24	0.440
2200	2.16	34.33	27.44	74.77	1.72	63.94	64.22	0.440
2100	2.24	34.28	27.39	78.73	1.65	63.94	64.21	0.440
2000	2.31	34.33	27.43	75.25	1.57	64.10	64.36	0.440
1900	2.40	34.32	27.42	76.56	1.50	64.06	64.30	0.440
1800	2.49	34.30	27.39	78.74	1.42	64.23	64.47	0.440
1700	2.62	34.30	27.39	79.44	1.34	64.36	64.58	0.440
1600	2.72	34.28	27.36	81.81	1.26	64.48	64.68	0.440
1500	2.91	34.30	27.35	82.82	1.18	64.45	64.64	0.440
1400	3.14	34.28	27.32	86.00	1.09	64.26	64.44	0.440
1300	3.46	34.34	27.34	84.80	1.01	64.37	64.54	0.440
1200	3.81	34.23	27.22	95.98	0.91	64.45	64.60	0.440
1100	4.23	34.24	27.18	99.61	0.81	64.51	64.65	0.440
1000	4.73	34.26	27.15	103.75	0.72	64.53	64.65	0.440
900	4.97	34.26	27.12	105.96	0.61	64.61	64.72	0.440



DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
800	5.47	34.23	27.03	113.43	0.50	64.64	64.75	0.440
700	5.98	34.27	26.99	116.37	0.39	64.73	64.82	0.439
600	6.71	34.31	26.94	121.34	0.27	64.79	64.86	0.430
500	7.78	34.41	26.86	128.69	0.14	64.65	64.72	0.440
490	7.99	34.43	26.85	129.92	0.13	64.63	64.70	0.440
480	8.17	34.45	26.84	130.60	0.11	64.63	64.70	0.440
470	8.39	34.48	26.83	131.63	0.10	64.66	64.72	0.440
460	8.61	34.47	26.78	135.55	0.08	64.70	64.76	0.440
450	8.82	34.44	26.74	140.62	0.07	64.75	64.81	0.431
440	9.01	34.46	26.71	142.95	0.05	64.81	64.86	0.430
430	9.16	34.48	26.70	143.43	0.04	64.85	64.90	0.430
420	9.33	34.50	26.70	144.26	0.03	64.87	64.92	0.430
410	9.53	34.52	26.67	146.42	0.02	64.87	64.92	0.430
400	9.72	34.53	26.65	148.62	0.01	64.79	64.84	0.435
390	9.90	34.55	26.64	149.67	0.02	64.68	64.72	0.440
380	10.11	34.57	26.62	151.48	0.04	64.58	64.63	0.440
370	10.36	34.59	26.59	154.36	0.05	64.50	64.55	0.440
360	10.59	34.60	26.55	157.06	0.07	64.43	64.47	0.440
350	10.78	34.61	26.53	159.27	0.08	64.41	64.46	0.440
340	10.92	34.62	26.51	160.88	0.10	64.50	64.54	0.440
330	11.07	34.62	26.49	163.26	0.11	64.68	64.72	0.440
320	11.25	34.60	26.44	167.47	0.13	64.83	64.87	0.430
310	11.41	34.60	26.41	170.54	0.15	64.83	64.87	0.430
300	11.54	34.63	26.41	170.05	0.17	64.83	64.87	0.430
290	11.68	34.67	26.41	169.87	0.18	64.88	64.91	0.430
280	11.82	34.67	26.39	171.70	0.20	64.91	64.94	0.430
270	11.96	34.69	26.37	172.66	0.22	64.96	64.99	0.430
260	12.10	34.72	26.37	172.87	0.24	64.94	64.98	0.430
250	12.26	34.72	26.34	175.43	0.25	64.64	64.68	0.439
240	12.42	34.70	26.30	179.70	0.27	63.91	63.94	0.449
230	12.54	34.68	26.27	183.24	0.29	63.00	63.03	0.459
220	12.66	34.70	26.25	184.27	0.31	62.31	62.34	0.477
210	12.80	34.73	26.25	184.00	0.33	61.85	61.88	0.480
200	12.96	34.74	26.22	186.18	0.35	62.16	62.19	0.472
190	13.16	34.73	26.17	190.88	0.37	63.49	63.51	0.454
180	13.36	34.73	26.12	194.75	0.39	64.30	64.33	0.442
170	13.52	34.76	26.11	195.64	0.40	64.32	64.34	0.440
160	13.70	34.81	26.12	194.35	0.42	64.45	64.47	0.440
150	13.93	34.88	26.13	193.67	0.44	64.77	64.79	0.435
140	14.20	34.90	26.09	197.21	0.46	64.78	64.80	0.435
130	14.48	34.91	26.04	202.19	0.48	64.58	64.59	0.440
120	14.72	34.93	26.00	205.29	0.50	64.46	64.47	0.440
110	14.94	34.95	25.97	208.00	0.52	64.38	64.39	0.440
100	15.16	34.94	25.92	212.82	0.54	64.30	64.31	0.440
90	15.31	34.94	25.88	216.05	0.56	64.22	64.23	0.440
80	15.47	34.93	25.83	220.47	0.59	64.08	64.09	0.450
70	15.63	34.91	25.78	225.21	0.61	63.98	63.99	0.450
60	15.87	34.91	25.72	229.96	0.63	63.76	63.77	0.450
50	16.24	34.94	25.67	235.31	0.66	63.20	63.20	0.458
40	16.77	35.02	25.60	241.16	0.68	62.25	62.25	0.475
30	18.08	35.17	25.38	261.31	0.71	60.47	60.48	0.502
20	20.19	35.35	24.98	299.29	0.73	55.99	55.99	0.585
10	21.45	35.46	24.74	322.10	0.76	50.41	50.41	0.689
6	21.80	35.49	24.67	328.41	0.77	48.21	48.21	0.730

WELOC 77 STA 63A 9-JUN-77 1230 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	20.31	35.21	24.86	310.94	0.03	51.67	51.67	0.661
20	19.56	35.06	24.94	303.15	0.06	48.96	48.96	0.710
30	17.90	35.04	25.35	264.63	0.09	52.93	52.94	0.642
40	16.86	35.08	25.63	237.90	0.11	59.90	59.90	0.514
50	16.31	35.12	25.79	223.21	0.14	62.08	62.09	0.480
60	16.09	35.10	25.82	220.68	0.16	61.57	61.57	0.483
70	15.88	35.11	25.88	215.15	0.18	62.38	62.39	0.475
80	15.70	35.11	25.91	212.19	0.20	63.74	63.75	0.450
90	15.61	35.16	25.98	207.01	0.22	63.73	63.74	0.450
100	15.45	35.11	25.98	207.11	0.24	63.39	63.40	0.460
110	15.33	35.10	26.00	205.30	0.26	63.11	63.12	0.460
120	15.25	35.08	26.00	205.56	0.29	62.74	62.76	0.470
130	14.97	35.05	26.04	202.11	0.31	62.63	62.64	0.470
140	14.76	35.03	26.07	199.33	0.33	62.60	62.61	0.470
150	14.50	35.02	26.12	194.99	0.34	62.83	62.85	0.468
160	14.30	35.02	26.16	191.20	0.37	63.55	63.57	0.452
170	14.10	34.96	26.15	192.07	0.39	63.47	63.49	0.458
180	13.97	35.02	26.23	185.48	0.40	63.89	63.91	0.450
190	13.95	35.02	26.24	184.76	0.42	63.83	63.86	0.450
200	13.94	35.02	26.24	184.76	0.44	64.04	64.06	0.450
210	13.81	34.98	26.23	186.19	0.46	64.01	64.04	0.450
220	13.62	34.96	26.25	184.17	0.48	63.95	63.98	0.450
230	13.31	34.96	26.32	177.65	0.49	64.03	64.06	0.450
240	13.18	34.94	26.33	176.83	0.51	64.32	64.35	0.440
250	13.08	34.95	26.35	174.96	0.53	63.96	63.99	0.446
260	12.99	34.93	26.37	174.08	0.54	63.39	63.42	0.454
270	12.87	34.85	26.33	177.82	0.56	62.55	62.58	0.470
280	12.66	34.92	26.42	168.95	0.58	62.19	62.23	0.473
290	12.59	34.89	26.41	170.43	0.60	62.39	62.42	0.470
300	12.45	34.87	26.43	169.24	0.62	63.00	63.04	0.462
310	12.28	34.85	26.44	168.64	0.63	63.04	63.08	0.463
320	12.04	34.84	26.48	164.14	0.65	64.78	64.82	0.434
330	11.80	34.82	26.50	162.44	0.67	64.78	64.82	0.436
340	11.59	34.73	26.48	164.39	0.68	63.94	63.98	0.450
350	11.26	34.72	26.54	159.41	0.70	64.44	64.48	0.440
360	10.97	34.77	26.62	151.26	0.72	64.24	64.28	0.440
370	10.76	34.77	26.65	148.10	0.73	64.00	64.05	0.450
380	10.47	34.65	26.62	151.54	0.74	63.72	63.77	0.450
390	10.19	34.71	26.71	143.27	0.76	64.41	64.46	0.440
400	10.00	34.68	26.72	142.09	0.77	64.58	64.63	0.440
410	9.78	34.69	26.77	137.97	0.79	64.68	64.73	0.440
420	9.54	34.69	26.81	134.00	0.80	64.70	64.76	0.440
430	9.28	34.65	26.82	132.69	0.82	64.65	64.70	0.440
440	9.07	34.70	26.89	126.14	0.83	64.64	64.70	0.440
450	8.95	34.64	26.87	128.60	0.84	64.83	64.88	0.430
460	8.77	34.67	26.92	123.92	0.85	64.75	64.81	0.430
470	8.52	34.57	26.88	127.04	0.86	64.70	64.75	0.440
480	8.40	34.65	26.96	120.11	0.88	64.77	64.83	0.430
490	8.27	34.62	26.95	120.23	0.89	64.79	64.85	0.430
500	8.13	34.68	27.02	114.28	0.90	64.81	64.87	0.430
600	7.02	34.55	27.09	108.26	1.01	65.00	65.07	0.430
700	6.17	34.57	27.21	96.34	1.11	65.02	65.11	0.430
800	5.56	34.54	27.26	91.85	1.21	65.00	65.11	0.430
900	4.93	34.56	27.35	83.70	1.29	64.98	65.09	0.430
1000	4.59	34.54	27.38	81.52	1.38	64.67	64.80	0.430



DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	4.25	34.58	27.45	75.13	1.45	64.76	64.90	0.430
1200	3.86	34.59	27.49	70.65	1.52	64.83	64.98	0.430
1300	3.56	34.65	27.57	62.99	1.59	64.63	64.79	0.440
1400	3.27	34.65	27.60	60.51	1.65	64.68	64.86	0.430
1500	3.01	34.63	27.62	59.15	1.71	64.65	64.84	0.430
1600	2.83	34.66	27.65	55.49	1.77	64.57	64.77	0.440
1700	2.68	34.66	27.67	54.18	1.82	64.82	65.04	0.430
1800	2.51	34.68	27.70	51.50	1.87	64.83	65.06	0.430
1900	2.40	34.69	27.71	49.96	1.93	64.69	64.94	0.430
2000	2.29	34.69	27.72	48.64	1.97	64.52	64.78	0.440
2100	2.21	34.70	27.74	47.25	2.02	64.62	64.89	0.430
2200	2.14	34.68	27.73	48.08	2.07	64.85	65.13	0.430
2300	2.08	34.70	27.75	46.89	2.12	64.60	64.90	0.430
2400	1.99	34.72	27.77	44.51	2.16	63.71	64.03	0.450
2500	1.90	34.73	27.78	43.51	2.21	63.86	64.18	0.440
2600	1.84	34.73	27.79	42.25	2.25	64.38	64.71	0.440
2700	1.80	34.74	27.80	42.02	2.29	64.70	65.04	0.430
2800	1.76	34.74	27.80	41.85	2.33	64.72	65.08	0.430
2900	1.75	34.75	27.82	40.94	2.37	64.89	65.25	0.430
3000	1.74	34.73	27.80	42.49	2.41	64.85	65.23	0.430
3100	1.75	34.73	27.80	42.89	2.46	64.83	65.22	0.430
3200	1.75	34.76	27.82	41.73	2.50	64.78	65.19	0.430
3300	1.75	34.73	27.80	44.03	2.55	64.75	65.17	0.430
3400	1.75	34.74	27.81	43.94	2.59	64.69	65.13	0.430
3500	1.76	34.75	27.81	43.66	2.63	64.73	65.17	0.430
3600	1.76	34.73	27.80	45.04	2.68	64.56	65.01	0.430
3700	1.76	34.74	27.80	45.10	2.72	64.45	64.92	0.430
3800	1.76	34.71	27.78	47.51	2.77	64.28	64.76	0.440
3900	1.77	34.73	27.79	46.18	2.81	64.17	64.67	0.440
4000	1.76	34.75	27.81	45.13	2.86	63.90	64.41	0.440
4100	1.75	34.73	27.80	46.70	2.91	63.77	64.29	0.440
4200	1.75	34.73	27.79	46.80	2.95	63.82	64.36	0.440
4300	1.75	34.75	27.82	45.70	3.00	63.87	64.42	0.440
4400	1.75	34.62	27.71	54.97	3.05	64.02	64.58	0.440
4500	1.75	34.57	27.67	58.71	3.10	63.95	64.53	0.440
4600	1.75	34.73	27.80	47.77	3.15	63.88	64.47	0.440
4700	1.75	34.72	27.79	49.20	3.20	63.78	64.38	0.440
4800	1.76	34.71	27.78	50.25	3.25	63.79	64.40	0.440
4900	1.77	34.79	27.84	45.30	3.30	63.78	64.41	0.440
5000	1.78	34.76	27.83	47.46	3.34	63.72	64.36	0.440
5100	1.79	34.71	27.78	51.79	3.39	63.64	64.29	0.440
5200	1.80	34.71	27.78	52.17	3.44	63.34	64.01	0.450
5300	1.81	34.70	27.76	53.70	3.50	63.42	64.10	0.450
5400	1.82	34.70	27.77	53.95	3.56	63.37	64.06	0.450
5500	1.84	34.70	27.76	54.84	3.61	63.37	64.08	0.450
5600	1.85	34.69	27.76	55.85	3.66	63.37	64.08	0.450
5700	1.86	34.69	27.75	56.91	3.71	63.15	63.88	0.450
5800	1.87	34.70	27.76	55.92	3.77	63.05	63.79	0.450
5900	1.89	34.79	27.83	51.03	3.83	62.96	63.72	0.450
6000	1.90	34.68	27.75	58.51	3.88	62.89	63.66	0.450
6100	1.92	34.66	27.73	60.59	3.94	62.85	63.63	0.450
6200	1.93	34.66	27.73	60.90	4.00	62.78	63.58	0.450
6270	1.94	34.67	27.73	60.81	4.05	62.64	63.45	0.460



WELDC 77 STA 68 13-JUN-77 0440 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
10	24.62	35.38	23.76	414.87	0.04	58.33	58.33	0.540
20	24.63	35.37	23.76	416.03	0.08	58.26	58.26	0.540
30	24.63	35.38	23.77	415.78	0.13	58.25	58.25	0.540
40	24.27	35.03	23.61	431.52	0.17	58.49	58.50	0.536
50	20.27	34.86	24.60	337.22	0.21	60.24	60.24	0.512
60	17.71	35.03	25.39	261.94	0.23	62.15	62.16	0.477
70	16.53	34.98	25.63	239.60	0.26	62.85	62.86	0.462
80	15.19	34.97	25.92	211.88	0.28	63.71	63.72	0.450
90	14.42	34.94	26.06	197.81	0.30	64.29	64.30	0.440
100	13.88	34.95	26.19	186.32	0.32	64.68	64.69	0.440
110	13.63	34.94	26.24	182.29	0.34	64.73	64.74	0.440
120	13.51	34.95	26.27	179.88	0.36	64.67	64.68	0.440
130	13.43	34.95	26.28	178.59	0.37	64.61	64.63	0.440
140	13.40	34.95	26.29	178.08	0.40	64.72	64.73	0.440
150	13.33	34.95	26.30	177.27	0.41	64.76	64.77	0.436
160	13.25	34.96	26.33	174.84	0.43	64.86	64.88	0.430
170	13.17	34.93	26.32	175.94	0.44	64.86	64.88	0.430
180	13.04	34.92	26.34	174.54	0.46	64.89	64.91	0.430
190	12.94	34.92	26.36	172.81	0.48	64.82	64.85	0.430
200	12.87	34.91	26.37	171.61	0.50	64.91	64.93	0.430
210	12.75	34.92	26.40	169.53	0.51	65.02	65.05	0.430
220	12.63	34.91	26.42	167.99	0.53	65.03	65.06	0.430
230	12.51	34.91	26.44	166.01	0.55	65.01	65.04	0.430
240	12.43	34.90	26.45	165.48	0.56	64.96	64.99	0.430
250	12.33	34.88	26.45	165.21	0.58	64.99	65.02	0.430
260	12.20	34.87	26.48	163.22	0.60	64.94	64.97	0.430
270	12.04	34.89	26.51	160.10	0.61	64.89	64.93	0.430
280	11.90	34.88	26.53	158.41	0.63	64.94	64.98	0.430
290	11.78	34.84	26.52	159.26	0.65	64.99	65.02	0.430
300	11.56	34.83	26.56	156.10	0.67	65.01	65.04	0.430
310	11.34	34.82	26.59	152.99	0.68	64.97	65.01	0.430
320	11.21	34.79	26.60	152.84	0.69	65.03	65.07	0.430
330	11.04	34.77	26.61	152.05	0.71	65.01	65.05	0.430
340	10.85	34.76	26.63	149.31	0.72	64.99	65.03	0.430
350	10.70	34.71	26.62	150.66	0.74	64.91	64.95	0.430
360	10.49	34.69	26.65	148.31	0.75	64.56	64.60	0.440
370	10.19	34.68	26.69	144.16	0.77	64.07	64.11	0.449
380	9.95	34.68	26.73	140.80	0.78	63.84	63.89	0.450
390	9.62	34.56	26.70	143.71	0.79	63.67	63.72	0.450
400	9.34	34.64	26.81	133.89	0.81	63.87	63.92	0.450
410	9.16	34.64	26.83	131.14	0.82	64.24	64.29	0.440
420	8.96	34.62	26.85	129.80	0.83	64.26	64.31	0.440
430	8.82	34.65	26.90	125.01	0.85	64.42	64.47	0.440
440	8.69	34.65	26.92	123.17	0.86	64.76	64.81	0.433
450	8.58	34.64	26.92	122.65	0.87	64.77	64.82	0.430
460	8.49	34.63	26.94	121.89	0.88	64.84	64.90	0.430
470	8.40	34.62	26.93	122.25	0.90	64.80	64.86	0.430
480	8.28	34.62	26.96	119.86	0.91	64.90	64.96	0.430
490	8.21	34.64	26.98	117.66	0.92	64.93	64.99	0.430
500	8.16	34.65	26.99	116.34	0.93	64.94	65.00	0.430
600	7.28	34.60	27.08	108.68	1.04	65.06	65.14	0.430
700	6.49	34.55	27.16	102.69	1.15	65.15	65.23	0.430
800	5.59	34.55	27.27	91.33	1.25	65.16	65.26	0.430
900	4.97	34.56	27.35	83.85	1.33	65.15	65.27	0.430
1000	4.59	34.58	27.41	78.36	1.41	65.12	65.25	0.430
1100	4.18	34.57	27.45	74.89	1.49	65.11	65.25	0.430
1200	3.88	34.59	27.49	70.72	1.56	65.18	65.33	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
1300	3.58	34.66	27.58	62.98	1.63	65.11	65.28	0.430
1400	3.31	34.62	27.58	62.65	1.69	65.13	65.31	0.430
1500	3.05	34.63	27.61	59.50	1.75	65.14	65.33	0.430
1600	2.79	34.66	27.65	55.47	1.81	65.22	65.43	0.422
1700	2.60	34.65	27.66	54.30	1.87	65.28	65.49	0.420
1800	2.48	34.67	27.69	51.90	1.92	65.25	65.47	0.420
1900	2.37	34.72	27.74	48.71	1.96	65.23	65.47	0.420
2000	2.29	34.70	27.73	48.21	2.01	65.20	65.45	0.427
2100	2.22	34.69	27.73	48.43	2.06	65.22	65.48	0.420
2200	2.15	34.70	27.74	47.22	2.11	65.18	65.46	0.420
2300	2.10	34.69	27.74	47.33	2.15	65.08	65.38	0.430
2400	2.00	34.76	27.81	41.76	2.20	65.04	65.35	0.430
2500	1.93	34.71	27.77	44.82	2.24	64.88	65.19	0.430
2600	1.88	34.72	27.78	44.00	2.29	64.93	65.26	0.430
2700	1.83	34.71	27.77	44.68	2.33	65.00	65.35	0.430
2800	1.80	34.74	27.80	41.89	2.37	65.06	65.41	0.430
2900	1.77	34.75	27.81	41.39	2.41	65.06	65.43	0.430
3000	1.76	34.74	27.81	42.35	2.46	65.04	65.42	0.430
3100	1.75	34.73	27.80	43.78	2.49	65.07	65.46	0.420
3200	1.75	34.72	27.79	44.56	2.54	64.97	65.38	0.430
3300	1.75	34.73	27.80	43.80	2.58	64.93	65.35	0.430
3400	1.76	34.71	27.78	45.68	2.62	64.87	65.30	0.430
3500	1.77	34.72	27.79	45.17	2.67	64.72	65.17	0.430?
3554	<del>0.00</del> 1.76	34.73	27.80	45.12	2.69	64.54	64.99	0.430



WELOC 77 STA 70 13-JUN-77 1545 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	24.32	35.35	23.84	408.03	0.05	58.13	58.13	0.540
20	23.79	35.22	23.90	403.43	0.09	57.45	57.45	0.555
30	22.81	35.04	24.03	389.83	0.13	57.34	57.35	0.556
40	20.12	35.15	24.86	311.87	0.16	59.31	59.31	0.522
50	18.89	35.14	25.18	282.21	0.19	60.26	60.26	0.510
60	17.39	34.75	25.25	275.40	0.21	61.04	61.05	0.492
70	15.66	34.97	25.82	221.39	0.24	62.97	62.97	0.462
80	15.10	35.03	26.00	204.50	0.26	63.70	63.71	0.450
90	14.50	34.99	26.09	195.51	0.28	64.62	64.64	0.440
100	14.31	35.04	26.17	188.31	0.30	64.95	64.97	0.430
110	14.08	34.98	26.17	188.09	0.31	64.99	65.00	0.430
120	13.94	34.98	26.20	185.88	0.34	65.07	65.08	0.430
130	13.84	34.99	26.23	183.93	0.36	65.08	65.10	0.430
140	13.81	35.01	26.25	181.75	0.37	65.08	65.09	0.430
150	13.78	35.01	26.26	181.61	0.39	65.04	65.06	0.430
160	13.70	34.98	26.26	181.77	0.41	65.09	65.10	0.430
170	13.57	34.97	26.27	180.52	0.43	65.15	65.17	0.430
180	13.50	34.96	26.28	180.12	0.44	65.13	65.15	0.430
190	13.37	34.93	26.29	179.66	0.46	65.17	65.19	0.430
200	13.25	34.94	26.31	177.29	0.48	65.15	65.18	0.430
210	13.14	34.95	26.35	174.29	0.50	65.23	65.26	0.430
220	13.06	34.95	26.36	173.41	0.51	65.18	65.21	0.430
230	12.97	34.92	26.35	174.22	0.53	65.23	65.26	0.430
240	12.84	34.94	26.39	170.86	0.55	65.32	65.35	0.430
250	12.73	34.93	26.41	169.93	0.57	65.29	65.32	0.430
260	12.65	34.92	26.42	168.76	0.58	65.24	65.27	0.430
270	12.59	34.92	26.43	168.27	0.60	65.30	65.33	0.430
280	12.42	34.86	26.44	167.78	0.61	65.38	65.41	0.430
290	12.29	34.89	26.47	165.08	0.63	65.39	65.42	0.423
300	12.18	34.88	26.48	163.95	0.65	65.32	65.36	0.430
310	11.99	34.89	26.53	159.78	0.66	65.28	65.31	0.430
320	11.74	34.79	26.50	162.49	0.68	65.20	65.24	0.430
330	11.39	34.82	26.59	154.78	0.70	65.23	65.27	0.430
340	11.07	34.83	26.65	147.93	0.71	65.26	65.31	0.430
350	10.91	34.80	26.66	148.17	0.73	65.08	65.12	0.430
360	10.59	34.78	26.71	142.81	0.74	64.44	64.49	0.440
370	10.08	34.68	26.71	142.43	0.76	64.19	64.24	0.440
380	9.72	34.71	26.80	134.07	0.77	64.30	64.35	0.440
390	9.46	34.74	26.86	128.41	0.78	64.80	64.85	0.430
400	9.41	34.74	26.87	127.44	0.80	64.91	64.96	0.430
410	9.35	34.67	26.83	131.59	0.81	65.14	65.19	0.430
420	9.23	34.71	26.88	127.19	0.82	65.21	65.27	0.430
430	9.15	34.67	26.86	129.19	0.83	65.25	65.30	0.430
440	9.03	34.68	26.88	127.08	0.85	65.22	65.27	0.430
450	8.95	34.66	26.88	127.11	0.86	65.21	65.27	0.430
460	8.83	34.66	26.90	125.94	0.87	65.21	65.26	0.430
470	8.75	34.67	26.92	124.14	0.89	65.20	65.26	0.430
480	8.68	34.65	26.91	124.01	0.90	65.21	65.27	0.430
490	8.56	34.63	26.92	124.13	0.91	65.24	65.30	0.430
500	8.43	34.63	26.94	121.96	0.92	65.27	65.34	0.430
600	7.44	34.64	27.09	107.94	1.04	65.34	65.41	0.430
700	6.62	34.59	27.17	100.81	1.14	65.40	65.49	0.420
800	5.85	34.58	27.26	92.54	1.24	65.40	65.50	0.420
900	5.22	34.65	27.40	79.89	1.33	65.33	65.45	0.420
1000	4.63	34.59	27.41	78.07	1.41	65.38	65.50	0.420
1100	4.26	34.58	27.45	75.34	1.49	65.40	65.54	0.420
1200	3.95	34.58	27.48	71.85	1.56	65.36	65.51	0.420



DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1300	3.70	34.61	27.53	67.68	1.63	65.36	65.52	0.420
1400	3.31	34.61	27.57	63.41	1.69	65.33	65.50	0.420
1500	3.05	34.64	27.62	58.88	1.75	65.31	65.50	0.420
1600	2.86	34.66	27.65	55.76	1.81	65.23	65.44	0.426
1700	2.67	34.67	27.68	53.36	1.86	65.26	65.48	0.420
1800	2.48	34.73	27.74	46.99	1.91	65.34	65.57	0.420
1900	2.38	34.71	27.74	48.00	1.96	65.39	65.63	0.420
2000	2.27	34.68	27.71	49.47	2.01	65.39	65.65	0.420
2100	2.19	34.72	27.75	46.23	2.06	65.38	65.65	0.420
2200	2.13	34.74	27.77	44.63	2.10	65.27	65.55	0.420
2300	2.06	34.71	27.75	46.33	2.15	65.30	65.59	0.420
2400	1.99	34.69	27.75	46.21	2.19	65.26	65.56	0.420
2500	1.92	34.72	27.78	44.06	2.24	65.19	65.51	0.420
2600	1.87	34.72	27.78	43.73	2.28	65.14	65.47	0.420
2700	1.84	34.72	27.78	43.74	2.33	65.10	65.44	0.420
2800	1.81	34.73	27.79	42.90	2.37	65.09	65.44	0.420
2900	1.77	34.73	27.79	42.89	2.41	65.18	65.55	0.420
3000	1.75	34.71	27.78	44.55	2.46	65.20	65.58	0.420
3100	1.75	34.71	27.78	44.41	2.50	65.20	65.59	0.420
3200	1.75	34.71	27.78	44.67	2.55	65.14	65.54	0.420
3300	1.76	34.72	27.79	44.98	2.59	65.06	65.48	0.420
3400	1.77	34.71	27.78	46.02	2.64	64.92	65.35	0.430
3500	1.78	34.73	27.80	45.00	2.68	64.61	65.05	0.430
3494	1.78	34.73	27.80	44.77	2.68	64.57	65.01	0.430

## WELOC 77 STA 71 13-JUN-77 2000 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	23.80	35.04	23.76	416.08	0.04	57.88	57.88	0.550
20	22.04	34.86	24.12	381.38	0.08	57.80	57.80	0.550
30	19.44	34.82	24.79	318.29	0.12	59.24	59.25	0.528
40	17.46	35.01	25.43	257.35	0.14	62.07	62.07	0.476
50	16.44	34.91	25.60	242.03	0.17	63.12	63.13	0.460
60	15.49	35.05	25.92	211.21	0.19	64.02	64.03	0.447
70	15.03	35.06	26.03	201.00	0.21	64.42	64.43	0.440
80	14.86	35.06	26.07	197.62	0.23	64.72	64.73	0.440
90	14.70	35.04	26.09	196.21	0.25	64.85	64.86	0.430
100	14.40	35.02	26.14	191.84	0.27	64.93	64.94	0.430
110	14.27	35.04	26.18	188.14	0.29	64.92	64.94	0.430
120	14.24	34.99	26.15	190.83	0.31	64.96	64.97	0.430
130	14.15	35.00	26.18	188.92	0.33	64.94	64.96	0.430
140	13.97	34.94	26.18	189.40	0.35	64.97	64.99	0.430
150	13.89	34.99	26.23	184.66	0.37	65.10	65.12	0.430
160	13.83	34.95	26.21	186.65	0.38	65.15	65.17	0.430
170	13.76	34.98	26.24	183.38	0.40	65.14	65.16	0.430
180	13.71	35.01	26.27	181.23	0.42	65.10	65.12	0.430
190	13.61	34.93	26.23	184.84	0.44	65.07	65.10	0.430
200	13.49	34.93	26.26	182.77	0.46	65.07	65.09	0.430
210	13.29	34.95	26.31	177.79	0.47	65.08	65.10	0.430
220	13.24	34.96	26.34	175.78	0.49	65.15	65.17	0.430
230	13.17	34.91	26.31	178.40	0.51	65.07	65.09	0.430
240	13.04	34.92	26.34	175.99	0.53	65.19	65.22	0.430
250	12.89	34.90	26.36	174.42	0.55	65.19	65.22	0.430
260	12.76	34.92	26.39	171.12	0.56	65.14	65.18	0.430
270	12.65	34.89	26.39	171.54	0.58	65.19	65.22	0.430
280	12.46	34.88	26.43	168.36	0.60	65.31	65.34	0.430
290	12.33	34.88	26.46	166.19	0.61	65.28	65.32	0.430
300	12.24	34.89	26.47	164.60	0.63	65.30	65.33	0.430
310	12.12	34.89	26.50	162.52	0.64	65.26	65.30	0.430
320	12.03	34.85	26.49	163.69	0.66	65.19	65.23	0.430
330	11.83	34.86	26.53	159.84	0.68	65.19	65.23	0.430
340	11.44	34.80	26.56	157.14	0.69	64.82	64.86	0.430
350	11.00	34.73	26.58	154.59	0.71	64.51	64.55	0.440
360	10.71	34.75	26.66	147.87	0.72	64.39	64.43	0.440
370	10.30	34.66	26.65	147.56	0.74	64.45	64.50	0.440
380	9.86	34.67	26.73	140.06	0.75	64.19	64.23	0.440
390	9.45	34.71	26.84	130.34	0.77	64.31	64.36	0.440
400	9.36	34.71	26.86	128.50	0.78	64.39	64.45	0.440
410	9.22	34.71	26.88	126.47	0.79	64.73	64.78	0.440
420	9.10	34.69	26.87	127.31	0.81	64.82	64.88	0.430
430	8.86	34.66	26.90	124.70	0.82	65.07	65.12	0.430
440	8.71	34.67	26.93	122.31	0.83	65.11	65.16	0.430
450	8.60	34.67	26.94	120.49	0.84	65.12	65.17	0.430
460	8.52	34.67	26.95	120.10	0.85	65.12	65.18	0.430
470	8.40	34.67	26.97	118.22	0.86	65.14	65.20	0.430
480	8.33	34.66	26.98	117.97	0.88	65.17	65.23	0.430
490	8.27	34.66	26.99	117.41	0.89	65.20	65.26	0.430
500	8.20	34.65	26.99	116.75	0.90	65.21	65.27	0.430
600	7.36	34.63	27.10	107.67	1.01	65.26	65.34	0.430
700	6.60	34.56	27.15	102.96	1.12	65.16	65.25	0.430
800	5.85	34.56	27.24	94.37	1.22	65.16	65.26	0.430
900	5.22	34.59	27.35	85.13	1.31	65.25	65.37	0.430
1000	4.72	34.60	27.41	78.35	1.39	65.29	65.42	0.428



DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
1100	4.33	34.59	27.44	76.10	1.47	65.27	65.41	0.430
1200	3.96	34.61	27.50	70.72	1.54	65.26	65.41	0.430
1300	3.69	34.62	27.54	66.89	1.61	65.04	65.21	0.430
1400	3.39	34.63	27.58	62.95	1.67	65.22	65.40	0.430
1500	3.13	34.65	27.62	59.56	1.74	65.24	65.43	0.430
1600	2.89	34.65	27.64	57.29	1.80	65.26	65.46	0.420
1700	2.73	34.66	27.66	55.27	1.85	65.21	65.43	0.427
1800	2.54	34.64	27.66	54.34	1.90	65.21	65.43	0.428
1900	2.37	34.70	27.73	48.46	1.96	65.25	65.49	0.420
2000	2.24	34.69	27.73	48.60	2.00	65.28	65.54	0.420
2100	2.16	34.72	27.76	45.72	2.05	65.30	65.57	0.420
2200	2.10	34.69	27.74	47.18	2.10	65.24	65.52	0.420
2300	2.02	34.70	27.76	45.74	2.14	65.20	65.49	0.420
2400	1.94	34.71	27.77	44.48	2.19	65.19	65.49	0.420
2500	1.88	34.74	27.79	42.64	2.23	65.00	65.31	0.430
2600	1.84	34.72	27.79	43.36	2.27	64.93	65.26	0.430
2700	1.81	34.70	27.77	44.68	2.32	64.91	65.25	0.430
2800	1.78	34.70	27.77	45.17	2.36	64.78	65.14	0.430
2900	1.78	34.73	27.79	43.06	2.40	64.63	65.00	0.430
3000	1.77	34.73	27.80	43.34	2.45	64.53	64.91	0.430
3100	1.76	34.70	27.78	45.56	2.50	63.82	64.22	0.440
3200	1.77	34.72	27.80	44.27	2.54	63.52	63.94	0.450
3300	1.78	34.72	27.78	45.06	2.58	63.70	64.13	0.450
3372	1.78	34.72	27.79	44.89	2.62	63.00	63.44	0.460



## WELOC 77 STA 72 13-JUN-77 2340 IN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	22.51	35.32	24.34	360.41	0.04	56.11	56.11	0.580
20	21.96	35.18	24.39	355.90	0.07	57.38	57.38	0.560
30	19.86	34.70	24.58	337.83	0.11	59.47	59.47	0.522
40	17.89	35.16	25.45	256.18	0.13	61.51	61.52	0.486
50	16.97	35.12	25.63	238.85	0.16	62.65	62.66	0.470
60	16.18	35.06	25.78	225.27	0.19	63.36	63.37	0.460
70	15.85	35.14	25.91	212.86	0.21	63.68	63.69	0.450
80	15.64	35.09	25.92	212.01	0.23	64.06	64.07	0.443
90	15.34	35.19	26.06	199.24	0.25	64.70	64.71	0.440
100	15.25	35.09	26.01	203.80	0.27	64.87	64.88	0.430
110	15.06	35.06	26.03	202.69	0.29	65.00	65.02	0.430
120	14.92	35.10	26.09	197.34	0.31	64.98	64.99	0.430
130	14.89	35.11	26.10	196.69	0.33	65.03	65.05	0.430
140	14.87	35.08	26.08	198.27	0.35	65.00	65.02	0.430
150	14.77	35.07	26.10	196.95	0.36	65.01	65.03	0.430
160	14.66	35.03	26.09	197.76	0.38	65.01	65.03	0.430
170	14.36	34.98	26.11	195.89	0.40	65.03	65.05	0.430
180	14.14	35.00	26.17	190.06	0.42	65.02	65.05	0.430
190	14.03	35.00	26.20	187.48	0.44	65.12	65.15	0.430
200	14.01	35.03	26.23	185.72	0.46	65.17	65.19	0.430
210	13.96	34.97	26.19	189.49	0.48	65.16	65.18	0.430
220	13.83	34.98	26.23	186.35	0.50	65.21	65.24	0.430
230	13.69	34.93	26.22	187.90	0.52	65.14	65.17	0.430
240	13.46	34.89	26.23	186.73	0.54	65.13	65.16	0.430
250	13.24	34.91	26.29	180.63	0.56	65.15	65.19	0.430
260	13.07	34.92	26.34	177.05	0.57	65.18	65.21	0.430
270	12.98	34.91	26.34	176.10	0.59	65.18	65.21	0.430
280	12.85	34.93	26.39	172.40	0.61	65.34	65.37	0.430
290	12.74	34.89	26.39	172.56	0.63	65.35	65.38	0.430
300	12.57	34.90	26.42	170.03	0.64	64.94	64.98	0.430
310	12.45	34.86	26.40	171.03	0.66	64.74	64.78	0.433
320	12.30	34.86	26.44	168.44	0.68	65.03	65.07	0.430
330	12.13	34.80	26.43	169.39	0.70	64.98	65.02	0.430
340	11.91	34.84	26.51	162.61	0.71	64.88	64.93	0.430
350	11.81	34.82	26.50	162.39	0.73	64.83	64.87	0.430
360	11.57	34.69	26.45	168.02	0.74	64.55	64.60	0.440
370	11.17	34.69	26.52	160.99	0.76	64.41	64.45	0.440
380	10.77	34.70	26.61	152.96	0.78	64.23	64.28	0.440
390	10.51	34.66	26.62	151.80	0.79	63.86	63.91	0.450
400	10.15	34.68	26.70	144.11	0.81	63.72	63.77	0.450
410	9.88	34.68	26.74	140.04	0.82	63.75	63.80	0.450
420	9.65	34.68	26.79	136.15	0.83	63.86	63.91	0.450
430	9.47	34.65	26.79	136.03	0.85	64.06	64.12	0.446
440	9.21	34.62	26.81	133.73	0.86	64.30	64.36	0.440
450	9.01	34.62	26.84	130.34	0.87	64.53	64.59	0.440
460	8.78	34.67	26.92	123.68	0.89	64.79	64.85	0.430
470	8.65	34.66	26.93	122.34	0.90	64.87	64.93	0.430
480	8.53	34.65	26.94	121.82	0.91	64.93	64.99	0.430
490	8.40	34.63	26.95	121.15	0.92	65.00	65.06	0.430
500	8.33	34.68	26.99	116.90	0.93	65.03	65.09	0.430
600	7.37	34.60	27.07	110.51	1.05	65.23	65.30	0.430
700	6.53	34.59	27.18	99.53	1.15	65.30	65.39	0.430
800	5.75	34.53	27.23	94.94	1.25	65.31	65.41	0.430
900	5.31	34.56	27.31	88.35	1.34	65.25	65.36	0.430
1000	4.85	34.56	27.36	83.33	1.42	65.25	65.37	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
1100	4.36	34.59	27.44	75.67	1.50	65.27	65.41	0.430
1200	3.98	34.60	27.50	70.84	1.57	65.21	65.36	0.430
1300	3.67	34.64	27.55	65.19	1.64	64.28	64.45	0.444
1400	3.31	34.63	27.59	61.86	1.70	64.88	65.06	0.430
1500	3.04	34.65	27.63	57.88	1.76	64.83	65.02	0.430
1600	2.79	34.66	27.65	55.00	1.82	64.88	65.08	0.430
1700	2.62	34.67	27.68	52.25	1.87	65.06	65.28	0.430
1800	2.47	34.69	27.71	50.41	1.93	65.15	65.38	0.430
1900	2.37	34.68	27.71	50.02	1.98	65.20	65.44	0.423
2000	2.28	34.70	27.73	48.30	2.02	65.26	65.51	0.420
2100	2.19	34.70	27.74	47.45	2.07	65.24	65.51	0.420
2200	2.09	34.69	27.74	47.39	2.12	65.30	65.58	0.420
2300	1.99	34.71	27.76	45.02	2.17	65.09	65.38	0.430
2400	1.96	34.70	27.76	45.42	2.21	64.94	65.24	0.430
2500	1.90	34.74	27.79	42.54	2.25	64.95	65.26	0.430
2600	1.87	34.72	27.78	43.98	2.30	64.73	65.06	0.430
2700	1.79	34.71	27.78	44.39	2.34	64.54	64.89	0.430
2800	1.73	34.71	27.78	43.36	2.38	64.18	64.54	0.440
2900	1.74	34.71	27.79	43.49	2.43	64.06	64.43	0.440
3000	1.75	34.71	27.78	43.80	2.47	64.00	64.39	0.440
3100	1.75	34.72	27.79	43.90	2.51	63.62	64.02	0.450
3187	1.75	34.73	27.80	43.73	2.55	62.84	63.26	0.460



## WELOC 77 STA 73 14-JUN-77 0330 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	20.50	35.15	24.75	320.26	0.03	43.15	43.15	0.846
20	20.12	35.15	24.87	310.48	0.07	49.08	49.08	0.715
30	18.64	35.16	25.25	273.63	0.09	59.47	59.47	0.521
40	17.60	35.17	25.52	248.93	0.12	61.98	61.99	0.480
50	16.30	35.06	25.74	227.53	0.14	62.84	62.84	0.470
60	15.85	35.13	25.90	212.58	0.17	63.47	63.48	0.452
70	15.82	35.17	25.93	210.01	0.19	63.90	63.91	0.450
80	15.63	35.13	25.96	208.53	0.21	64.41	64.42	0.440
90	15.59	35.15	25.97	207.17	0.23	64.61	64.62	0.440
100	15.48	35.16	26.01	204.59	0.25	64.71	64.72	0.440
110	15.34	35.12	26.01	204.16	0.27	64.79	64.80	0.440
120	15.31	35.24	26.10	195.49	0.29	64.85	64.86	0.430
130	15.29	35.25	26.12	194.04	0.31	64.88	64.90	0.430
140	15.15	35.10	26.04	202.48	0.33	64.88	64.90	0.430
150	14.78	35.07	26.09	197.57	0.35	64.87	64.89	0.430
160	14.72	35.06	26.10	196.77	0.37	64.96	64.98	0.430
170	14.68	35.04	26.10	197.76	0.39	64.80	64.82	0.438
180	14.62	35.05	26.11	196.54	0.41	64.65	64.68	0.440
190	14.52	35.05	26.13	194.90	0.43	64.54	64.56	0.440
200	14.31	35.03	26.16	192.32	0.44	64.56	64.58	0.440
210	14.11	35.03	26.21	187.60	0.46	64.60	64.62	0.440
220	14.01	35.01	26.22	187.51	0.48	64.62	64.65	0.440
230	13.83	35.00	26.24	185.15	0.50	64.65	64.68	0.440
240	13.69	34.99	26.26	183.64	0.52	64.69	64.72	0.440
250	13.54	34.97	26.28	182.00	0.54	64.65	64.68	0.440
260	13.37	34.97	26.31	179.49	0.56	64.66	64.69	0.440
270	13.27	34.95	26.33	178.67	0.57	64.58	64.61	0.440
280	13.19	34.95	26.34	177.52	0.59	64.58	64.62	0.440
290	13.09	34.94	26.35	176.26	0.61	64.53	64.56	0.440
300	12.93	34.93	26.37	174.54	0.63	64.77	64.81	0.432
310	12.74	34.91	26.40	172.57	0.64	65.05	65.09	0.430
320	12.36	34.88	26.44	167.77	0.66	64.46	64.50	0.440
330	11.89	34.84	26.50	162.14	0.68	64.10	64.14	0.449
340	11.72	34.89	26.57	155.69	0.69	64.28	64.32	0.440
350	11.67	34.84	26.55	158.24	0.71	64.31	64.36	0.440
360	11.22	34.60	26.44	168.43	0.72	64.61	64.65	0.440
370	10.60	34.72	26.65	148.59	0.74	64.40	64.45	0.440
380	10.42	34.73	26.69	144.71	0.76	64.23	64.28	0.440
390	10.17	34.63	26.66	148.01	0.77	64.08	64.13	0.443
400	9.81	34.66	26.74	139.80	0.79	64.06	64.11	0.450
410	9.57	34.70	26.80	133.99	0.80	64.15	64.20	0.440
420	9.44	34.68	26.82	132.62	0.81	64.30	64.35	0.440
430	9.26	34.63	26.81	133.77	0.83	64.37	64.42	0.440
440	9.03	34.66	26.87	127.54	0.84	64.10	64.15	0.446
450	8.86	34.63	26.87	127.98	0.85	64.34	64.40	0.440
460	8.60	34.57	26.87	128.54	0.87	64.73	64.79	0.440
470	8.37	34.64	26.96	119.68	0.88	64.53	64.59	0.440
480	8.27	34.66	26.99	117.11	0.89	64.86	64.92	0.430
490	8.18	34.67	27.01	114.74	0.90	64.89	64.95	0.430
500	8.15	34.66	27.00	115.75	0.91	65.04	65.11	0.430
600	7.22	34.58	27.07	109.66	1.02	65.26	65.33	0.430
700	6.35	34.56	27.18	99.13	1.13	65.21	65.30	0.430
800	5.57	34.58	27.29	89.02	1.22	65.25	65.35	0.430
900	5.03	34.60	27.38	81.77	1.31	65.27	65.38	0.430
1000	4.57	34.60	27.43	76.71	1.39	65.28	65.40	0.430



DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
1100	4.34	34.59	27.45	75.47	1.46	65.04	65.18	0.430
1200	4.02	34.55	27.45	75.25	1.54	65.17	65.32	0.430
1300	3.78	34.62	27.53	67.99	1.60	65.22	65.38	0.430
1400	3.43	34.64	27.59	62.61	1.67	65.08	65.26	0.430
1500	3.11	34.63	27.61	60.10	1.73	65.05	65.24	0.430
1600	2.84	34.66	27.65	55.48	1.79	64.93	65.14	0.430
1700	2.66	34.62	27.64	56.73	1.84	64.92	65.13	0.430
1800	2.48	34.69	27.71	50.83	1.90	64.99	65.22	0.430
1900	2.34	34.71	27.73	47.97	1.95	65.22	65.46	0.420
2000	2.25	34.68	27.72	48.82	2.00	65.29	65.54	0.420
2100	2.16	34.69	27.73	47.99	2.05	65.28	65.55	0.420
2200	2.07	34.68	27.73	47.61	2.09	65.19	65.46	0.422
2300	1.99	34.72	27.76	44.61	2.14	65.10	65.39	0.430
2400	1.93	34.68	27.75	46.50	2.18	64.99	65.30	0.430
2500	1.87	34.71	27.77	43.72	2.23	64.93	65.25	0.430
2600	1.81	34.73	27.79	42.88	2.27	64.72	65.05	0.430
2700	1.76	34.72	27.79	42.65	2.31	64.60	64.94	0.430
2776	1.73	34.71	27.78	43.69	2.35	64.23	64.59	0.440

## WELOC 77 STA 74 14-JUN-77 0715 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	20.37	34.97	24.66	329.66	0.03	44.23	44.24	0.820
20	19.96	34.95	24.76	320.43	0.07	45.15	45.15	0.794
30	18.06	35.06	25.32	267.83	0.10	57.84	57.85	0.554
40	16.60	35.07	25.68	233.37	0.12	62.13	62.14	0.481
50	16.17	35.10	25.81	221.36	0.14	62.89	62.90	0.462
60	16.01	35.09	25.84	218.96	0.16	63.22	63.22	0.460
70	15.92	35.14	25.90	214.22	0.19	63.44	63.45	0.460
80	15.82	35.18	25.94	209.88	0.21	63.62	63.63	0.450
90	15.72	35.15	25.94	209.82	0.23	63.91	63.92	0.450
100	15.63	35.15	25.97	208.27	0.25	63.96	63.97	0.450
110	15.56	35.12	25.96	209.06	0.27	64.09	64.10	0.450
120	15.38	35.11	25.98	207.07	0.29	64.25	64.26	0.440
130	15.15	35.03	25.98	207.77	0.31	64.35	64.36	0.440
140	15.01	35.01	25.99	206.46	0.33	64.14	64.16	0.440
150	14.69	35.00	26.06	200.67	0.35	64.17	64.19	0.441
160	14.54	35.04	26.12	194.95	0.37	64.17	64.19	0.440
170	14.49	34.99	26.09	197.90	0.39	64.25	64.27	0.440
180	14.41	35.02	26.13	194.35	0.41	64.43	64.45	0.440
190	14.39	35.01	26.13	195.04	0.43	64.41	64.44	0.440
200	14.33	35.01	26.14	194.17	0.45	64.54	64.56	0.440
210	14.31	35.03	26.16	192.14	0.47	64.45	64.48	0.440
220	14.26	35.02	26.17	192.23	0.49	64.47	64.49	0.440
230	14.15	34.98	26.16	193.56	0.51	64.43	64.46	0.440
240	13.96	34.98	26.20	189.95	0.53	64.45	64.48	0.440
250	13.74	34.95	26.22	187.81	0.55	64.49	64.52	0.440
260	13.48	34.92	26.26	184.82	0.56	64.51	64.55	0.440
270	13.37	34.97	26.31	179.21	0.58	64.65	64.68	0.440
280	13.35	34.97	26.32	179.22	0.60	64.69	64.72	0.440
290	13.23	34.86	26.26	185.73	0.62	64.76	64.80	0.437
300	12.94	34.92	26.36	175.84	0.63	64.86	64.89	0.430
310	12.88	34.92	26.37	174.33	0.65	64.83	64.87	0.430
320	12.76	34.90	26.39	173.42	0.67	64.76	64.80	0.431
330	12.59	34.88	26.40	172.44	0.69	64.11	64.15	0.449
340	12.32	34.89	26.46	166.32	0.70	64.69	64.73	0.440
350	12.14	34.86	26.48	165.55	0.72	63.92	63.96	0.450
360	12.00	34.82	26.47	165.95	0.74	64.50	64.55	0.440
370	11.54	34.78	26.52	161.69	0.76	64.67	64.72	0.440
380	10.55	34.61	26.57	155.79	0.77	64.11	64.16	0.444
390	10.00	34.71	26.74	139.27	0.78	63.87	63.92	0.450
400	9.81	34.75	26.80	134.03	0.80	63.86	63.91	0.450
410	9.65	34.69	26.79	135.35	0.81	64.18	64.23	0.443
420	9.46	34.69	26.82	132.46	0.83	64.71	64.76	0.435
430	9.30	34.66	26.82	132.52	0.84	64.84	64.89	0.430
440	9.09	34.65	26.85	130.16	0.85	64.85	64.90	0.430
450	8.91	34.67	26.90	125.31	0.86	64.79	64.84	0.431
460	8.70	34.64	26.91	124.57	0.88	64.67	64.72	0.440
470	8.52	34.62	26.92	123.34	0.89	64.77	64.83	0.430
480	8.35	34.63	26.96	120.54	0.90	64.86	64.92	0.430
490	8.26	34.65	26.99	117.52	0.91	64.87	64.93	0.430
500	8.14	34.65	27.00	116.18	0.92	64.91	64.97	0.430
600	7.19	34.60	27.10	107.11	1.03	65.11	65.18	0.430
700	6.26	34.56	27.18	99.07	1.14	64.98	65.07	0.430
800	5.41	34.55	27.30	88.91	1.23	65.06	65.16	0.430
900	4.85	34.57	27.38	81.22	1.31	65.19	65.31	0.430
1000	4.47	34.58	27.42	76.93	1.39	65.16	65.29	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	4.16	34.58	27.46	73.56	1.47	65.18	65.32	0.430
1200	3.85	34.60	27.51	69.36	1.53	65.14	65.29	0.430
1300	3.54	34.69	27.60	60.66	1.60	65.17	65.33	0.430
1400	3.36	34.62	27.58	63.38	1.67	65.08	65.26	0.430
1500	3.08	34.64	27.61	59.65	1.72	65.12	65.31	0.430
1600	2.90	34.63	27.63	58.10	1.78	65.21	65.42	0.430
1700	2.74	34.67	27.67	54.21	1.84	65.21	65.42	0.430
1800	2.54	34.68	27.70	51.54	1.89	65.13	65.36	0.430
1900	2.40	34.68	27.70	50.67	1.94	65.08	65.32	0.430
2000	2.33	34.66	27.70	51.49	1.99	65.07	65.32	0.430
2100	2.23	34.69	27.72	48.78	2.04	65.12	65.39	0.430
2200	2.11	34.70	27.75	46.85	2.09	65.12	65.40	0.430
2300	2.03	34.71	27.76	45.43	2.13	65.03	65.32	0.430
2400	1.99	34.68	27.74	47.03	2.18	64.99	65.29	0.430
2500	1.89	34.70	27.76	45.24	2.23	64.80	65.12	0.430
2600	1.81	34.70	27.78	43.99	2.27	64.78	65.11	0.430
2700	1.78	34.72	27.79	42.65	2.32	64.79	65.13	0.430
2800	1.77	34.86	27.90	33.35	2.35	64.73	65.09	0.430
2900	1.77	34.71	27.78	44.00	2.40	64.64	65.01	0.430
3000	1.77	34.72	27.79	44.03	2.45	64.58	64.97	0.430
3100	1.78	34.71	27.78	45.10	2.49	64.55	64.95	0.430
3200	1.78	34.72	27.79	44.56	2.53	64.43	64.84	0.430
3300	1.78	34.72	27.78	45.54	2.58	64.29	64.71	0.440
3400	1.78	34.73	27.79	45.25	2.62	64.48	64.91	0.430
3500	1.79	34.71	27.78	46.50	2.67	64.39	64.84	0.430
3534	1.79	34.73	27.79	45.31	2.68	64.03	64.48	0.440



## WELOC 77 STA 75 14-JUN-77 1200 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	20.85	34.67	24.30	364.08	0.04	46.86	46.86	0.761
20	19.50	34.88	24.82	314.84	0.07	52.35	52.36	0.650
30	18.21	34.83	25.11	287.21	0.10	58.78	58.79	0.532
40	16.48	35.15	25.78	224.40	0.13	62.13	62.13	0.481
50	15.92	35.15	25.90	213.13	0.15	63.35	63.36	0.460
60	15.78	35.14	25.93	210.52	0.17	63.56	63.57	0.450
70	15.73	35.15	25.95	209.07	0.19	63.79	63.80	0.450
80	15.51	35.15	26.00	204.98	0.21	63.94	63.95	0.450
90	15.31	35.08	25.98	206.03	0.23	64.16	64.17	0.444
100	15.18	35.04	25.99	206.14	0.25	63.85	63.87	0.450
110	15.12	35.05	26.00	204.93	0.28	63.76	63.78	0.450
120	15.09	35.06	26.02	203.51	0.30	63.88	63.90	0.450
130	15.02	35.04	26.02	203.89	0.32	64.20	64.21	0.440
140	14.91	35.05	26.05	201.73	0.34	64.27	64.28	0.440
150	14.87	35.06	26.06	200.22	0.35	64.35	64.37	0.440
160	14.80	35.05	26.08	199.59	0.37	64.44	64.46	0.440
170	14.72	35.04	26.08	199.26	0.39	64.38	64.40	0.440
180	14.61	35.04	26.10	197.44	0.41	64.40	64.42	0.440
190	14.46	35.03	26.13	194.40	0.43	64.65	64.68	0.440
200	14.39	35.04	26.15	193.48	0.45	64.59	64.61	0.440
210	14.28	35.00	26.15	193.99	0.47	64.67	64.70	0.440
220	14.22	35.02	26.18	191.42	0.49	64.67	64.69	0.440
230	14.22	35.04	26.20	190.43	0.51	64.66	64.69	0.440
240	14.14	35.02	26.19	190.43	0.53	64.62	64.65	0.440
250	14.01	34.98	26.20	190.83	0.55	64.56	64.60	0.440
260	13.86	34.98	26.22	188.10	0.56	64.54	64.57	0.440
270	13.64	34.96	26.25	185.65	0.59	64.55	64.59	0.440
280	13.56	34.95	26.26	185.05	0.61	64.53	64.56	0.440
290	13.39	34.92	26.27	184.08	0.62	64.37	64.41	0.440
300	13.22	34.94	26.32	179.71	0.64	64.27	64.30	0.440
310	13.09	34.91	26.32	179.40	0.66	64.58	64.62	0.440
320	12.90	34.90	26.36	176.45	0.68	64.83	64.87	0.430
330	12.78	34.88	26.36	176.26	0.70	64.82	64.86	0.430
340	12.60	34.84	26.37	175.17	0.71	64.66	64.70	0.440
350	12.36	34.86	26.43	169.80	0.73	64.81	64.85	0.430
360	12.07	34.80	26.44	168.75	0.75	64.80	64.85	0.430
370	11.45	34.58	26.39	174.08	0.76	65.00	65.04	0.430
380	10.92	34.69	26.58	155.81	0.78	65.01	65.05	0.430
390	10.61	34.77	26.69	145.57	0.79	64.68	64.73	0.440
400	10.14	34.49	26.55	158.30	0.81	64.89	64.94	0.430
410	9.64	34.70	26.80	134.52	0.82	64.84	64.89	0.430
420	9.50	34.67	26.80	134.64	0.84	64.87	64.92	0.430
430	9.35	34.71	26.85	129.84	0.85	64.77	64.82	0.437
440	9.14	34.66	26.85	129.81	0.87	64.50	64.56	0.440
450	8.86	34.61	26.85	129.12	0.88	64.78	64.84	0.430
460	8.66	34.59	26.87	127.99	0.89	64.85	64.91	0.430
470	8.40	34.66	26.96	119.25	0.90	64.90	64.96	0.430
480	8.20	34.63	26.97	118.38	0.91	64.94	65.00	0.430
490	8.05	34.57	26.95	120.15	0.93	64.95	65.01	0.430
500	7.87	34.64	27.03	112.67	0.94	65.05	65.11	0.430
600	7.02	34.60	27.12	105.04	1.05	65.14	65.21	0.430
700	6.23	34.54	27.18	99.14	1.15	65.17	65.26	0.430
800	5.51	34.57	27.29	88.81	1.24	64.98	65.08	0.430
900	4.92	34.57	27.37	82.56	1.33	65.18	65.29	0.430
1000	4.60	34.58	27.41	78.49	1.40	65.20	65.33	0.430
1100	4.20	34.61	27.47	72.70	1.48	65.19	65.33	0.430
1200	3.84	34.61	27.52	68.44	1.55	65.20	65.35	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
1300	3.56	34.61	27.54	65.49	1.62	65.10	65.27	0.430
1400	3.36	34.65	27.60	61.10	1.68	65.01	65.19	0.430
1500	3.13	34.65	27.61	59.49	1.74	65.01	65.20	0.430
1600	2.90	34.67	27.65	55.86	1.80	65.24	65.44	0.420
1700	2.74	34.67	27.67	54.20	1.86	65.29	65.51	0.420
1800	2.56	34.67	27.69	52.33	1.91	65.30	65.52	0.420
1900	2.42	34.70	27.72	49.20	1.96	65.27	65.51	0.420
2000	2.32	34.69	27.72	49.35	2.01	65.19	65.44	0.424
2100	2.24	34.70	27.74	47.51	2.06	65.12	65.38	0.430
2200	2.15	34.79	27.80	41.28	2.11	65.10	65.38	0.430
2300	2.06	34.71	27.75	45.96	2.15	65.06	65.35	0.430
2400	1.99	34.70	27.75	46.02	2.20	64.97	65.28	0.430
2500	1.94	34.71	27.76	45.43	2.24	64.99	65.31	0.430
2600	1.88	34.70	27.76	45.98	2.29	64.87	65.20	0.430
2700	1.83	34.66	27.74	47.59	2.33	64.77	65.11	0.430
2800	1.79	34.74	27.80	42.05	2.38	64.87	65.23	0.430
2900	1.77	34.72	27.78	43.74	2.42	64.87	65.24	0.430
3000	1.76	34.71	27.79	44.37	2.47	64.83	65.22	0.430
3100	1.76	34.71	27.78	44.66	2.51	64.81	65.20	0.430
3200	1.76	34.60	27.69	53.08	2.55	64.70	65.11	0.430
3300	1.76	34.69	27.76	47.11	2.60	64.66	65.08	0.430
3400	1.77	34.68	27.76	47.87	2.65	64.30	64.74	0.440
3500	1.78	34.69	27.77	47.15	2.70	63.77	64.22	0.440
3600	1.78	34.71	27.78	46.85	2.74	63.82	64.28	0.440
3657	1.78	34.70	27.77	48.14	2.77	63.14	63.62	0.450



## WELOC 77 STA 76 14-JUN-77 1900 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	23.38	34.73	23.64	427.04	0.04	54.41	54.41	0.610
20	22.90	34.75	23.79	412.46	0.09	54.36	54.37	0.610
30	20.58	34.94	24.58	338.22	0.13	53.95	53.96	0.620
40	18.71	35.04	25.15	284.43	0.15	59.23	59.23	0.524
50	17.30	35.13	25.56	245.02	0.17	62.02	62.03	0.480
60	16.44	35.08	25.73	229.77	0.20	62.90	62.91	0.467
70	15.80	35.10	25.89	214.04	0.22	63.31	63.32	0.460
80	15.61	35.11	25.94	209.90	0.24	63.84	63.85	0.450
90	15.46	35.16	26.01	203.40	0.26	64.30	64.31	0.440
100	15.29	35.05	25.96	208.66	0.29	64.45	64.46	0.440
110	15.14	35.08	26.02	203.22	0.31	64.57	64.58	0.440
120	15.06	35.06	26.02	203.47	0.33	64.43	64.44	0.440
130	14.94	35.07	26.05	201.08	0.35	64.62	64.63	0.440
140	14.89	35.05	26.05	201.04	0.37	64.55	64.57	0.440
150	14.82	35.05	26.07	199.30	0.38	64.47	64.49	0.440
160	14.73	35.01	26.06	200.67	0.40	64.27	64.29	0.440
170	14.58	34.99	26.07	199.90	0.42	63.89	63.91	0.450
180	14.33	35.01	26.15	193.04	0.44	64.02	64.05	0.448
190	14.24	35.02	26.17	191.18	0.46	64.16	64.19	0.440
200	14.16	34.97	26.15	193.09	0.49	64.22	64.24	0.440
210	14.07	34.98	26.17	191.20	0.51	64.30	64.32	0.440
220	13.93	34.97	26.19	189.46	0.53	64.39	64.42	0.440
230	13.82	34.97	26.22	187.34	0.54	64.25	64.28	0.440
240	13.64	34.97	26.26	183.93	0.56	64.42	64.45	0.440
250	13.53	34.98	26.29	181.21	0.58	64.42	64.45	0.440
260	13.45	34.96	26.29	181.61	0.59	64.43	64.46	0.440
270	13.38	34.94	26.29	181.98	0.62	64.45	64.48	0.440
280	13.28	34.92	26.29	181.85	0.63	64.50	64.54	0.440
290	13.16	34.84	26.25	185.13	0.65	64.67	64.71	0.440
300	13.01	34.93	26.36	176.03	0.67	64.84	64.87	0.430
310	12.83	34.84	26.31	179.60	0.69	64.00	64.04	0.447
320	12.56	34.88	26.40	171.91	0.71	64.08	64.12	0.444
330	12.31	34.85	26.43	169.22	0.72	64.71	64.75	0.434
340	11.96	34.75	26.42	170.19	0.74	64.72	64.77	0.440
350	11.61	34.80	26.53	160.34	0.76	64.81	64.85	0.430
360	11.29	34.76	26.56	157.76	0.77	64.87	64.92	0.430
370	10.81	34.71	26.60	153.45	0.79	64.91	64.96	0.430
380	10.40	34.65	26.64	150.14	0.80	64.40	64.45	0.439
390	9.96	34.66	26.72	141.87	0.82	63.76	63.81	0.450
400	9.69	34.66	26.77	137.92	0.83	63.03	63.08	0.460
410	9.37	34.65	26.81	133.85	0.85	62.76	62.81	0.470
420	9.05	34.58	26.80	133.86	0.86	63.08	63.14	0.460
430	8.81	34.68	26.93	122.44	0.87	63.50	63.56	0.454
440	8.67	34.65	26.92	123.05	0.88	64.12	64.17	0.444
450	8.50	34.62	26.92	122.70	0.89	64.62	64.68	0.440
460	8.38	34.68	26.99	116.73	0.90	64.34	64.40	0.440
470	8.22	34.64	26.98	117.65	0.92	64.31	64.37	0.440
474	8.16	34.65	26.99	115.69	0.92	64.47	64.53	0.440



## WELOC 77 STA 77 14-JUN-77 2045 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	23.53	34.60	23.50	440.45	0.04	55.11	55.11	0.600
20	23.48	34.60	23.51	439.54	0.09	54.92	54.93	0.600
30	22.96	34.39	23.51	440.58	0.13	53.82	53.83	0.620
40	20.04	34.64	24.50	346.07	0.17	56.38	56.38	0.575
50	18.82	35.03	25.11	288.56	0.20	59.70	59.71	0.520
60	17.98	34.98	25.28	272.12	0.23	61.85	61.85	0.482
70	17.07	35.08	25.58	244.39	0.25	62.85	62.85	0.467
80	16.20	35.13	25.82	220.97	0.28	63.70	63.71	0.450
90	15.95	35.13	25.88	216.37	0.30	63.82	63.83	0.450
100	15.80	35.14	25.92	212.31	0.32	64.02	64.04	0.450
110	15.57	34.96	25.84	220.54	0.34	64.29	64.31	0.440
120	15.18	35.03	25.97	207.52	0.36	64.46	64.48	0.440
130	15.04	35.06	26.03	202.49	0.38	64.56	64.57	0.440
140	14.98	35.04	26.03	203.55	0.40	64.53	64.54	0.440
150	14.87	35.00	26.02	204.36	0.43	64.41	64.43	0.440
160	14.72	35.03	26.08	199.78	0.45	64.40	64.42	0.440
170	14.65	35.05	26.11	196.17	0.47	64.29	64.31	0.440
180	14.60	35.05	26.12	195.44	0.49	64.19	64.22	0.440
190	14.44	35.01	26.12	195.87	0.51	64.07	64.09	0.450
200	14.25	35.02	26.17	191.74	0.52	63.80	63.83	0.450
210	14.06	34.99	26.19	190.27	0.54	63.76	63.78	0.450
220	13.88	34.96	26.21	188.66	0.56	64.09	64.12	0.450
230	13.74	34.99	26.25	184.67	0.58	64.24	64.26	0.440
240	13.68	34.99	26.27	183.45	0.60	64.31	64.34	0.440
250	13.54	34.94	26.26	184.46	0.62	64.26	64.29	0.440
260	13.36	34.93	26.28	182.24	0.63	64.31	64.34	0.440
270	13.23	34.95	26.33	177.80	0.65	64.32	64.35	0.440
280	13.09	34.90	26.31	179.35	0.67	63.73	63.77	0.450
290	12.84	34.90	26.38	173.92	0.69	63.10	63.14	0.460
300	12.62	34.88	26.40	171.99	0.70	63.22	63.26	0.460
310	12.45	34.90	26.44	168.02	0.72	63.58	63.62	0.452
320	12.29	34.85	26.44	168.30	0.74	63.84	63.88	0.450
330	12.00	34.85	26.50	162.91	0.75	64.50	64.54	0.440
340	11.83	34.91	26.58	155.69	0.77	64.28	64.32	0.440
350	11.56	34.77	26.51	161.74	0.79	64.50	64.55	0.440
360	11.21	34.76	26.57	156.17	0.81	64.60	64.64	0.440
370	11.08	34.78	26.60	152.97	0.82	64.41	64.46	0.440
380	10.85	34.69	26.59	155.06	0.83	64.61	64.66	0.440
390	10.41	34.67	26.64	149.82	0.85	64.73	64.78	0.438
400	9.99	34.66	26.71	143.35	0.86	64.72	64.76	0.440
410	9.58	34.65	26.78	136.76	0.88	64.56	64.62	0.440
420	9.30	34.71	26.86	128.75	0.89	63.79	63.85	0.450
430	9.03	34.59	26.82	132.96	0.90	63.82	63.87	0.450
440	8.71	34.62	26.89	125.83	0.92	64.23	64.28	0.440
450	8.53	34.67	26.95	119.86	0.93	64.45	64.51	0.440
460	8.42	34.59	26.91	123.50	0.94	64.65	64.70	0.440
470	8.17	34.66	27.00	115.69	0.95	64.73	64.79	0.440
480	8.01	34.60	26.98	117.10	0.97	64.76	64.82	0.430
490	7.86	34.65	27.05	110.96	0.98	64.71	64.78	0.440
500	7.81	34.64	27.04	111.76	0.98	64.65	64.71	0.440
600	7.03	34.61	27.13	104.11	1.10	64.90	64.98	0.430
700	6.29	34.61	27.23	95.14	1.19	65.08	65.17	0.430
800	5.83	34.58	27.27	92.12	1.29	65.03	65.13	0.430
900	5.15	34.58	27.35	84.59	1.37	65.20	65.32	0.430
1000	4.76	34.60	27.41	79.00	1.46	65.16	65.29	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	4.35	34.59	27.45	75.58	1.54	65.24	65.38	0.430
1200	3.97	34.60	27.50	70.80	1.61	65.19	65.34	0.430
1300	3.61	34.66	27.57	63.23	1.68	65.14	65.30	0.430
1400	3.23	34.65	27.61	60.13	1.74	65.11	65.29	0.430
1500	3.04	34.65	27.63	57.76	1.80	64.93	65.13	0.430
1600	2.80	34.66	27.65	55.46	1.85	65.17	65.37	0.430
1700	2.65	34.69	27.70	51.92	1.91	65.19	65.41	0.430
1800	2.55	34.68	27.69	51.83	1.96	65.16	65.39	0.430
1900	2.40	34.70	27.72	49.03	2.01	65.16	65.40	0.430
2000	2.29	34.70	27.73	48.04	2.06	65.11	65.36	0.430
2100	2.23	34.70	27.73	48.12	2.10	65.15	65.42	0.430
2200	2.16	34.71	27.75	46.76	2.15	65.10	65.38	0.430
2300	2.10	34.73	27.77	44.86	2.20	64.97	65.26	0.430
2400	2.02	34.71	27.76	45.71	2.24	65.03	65.33	0.430
2500	1.94	34.62	27.69	51.99	2.30	64.75	65.07	0.430
2600	1.89	34.72	27.78	43.94	2.34	64.87	65.21	0.430
2700	1.82	34.72	27.79	43.37	2.39	64.72	65.07	0.430
2800	1.78	34.72	27.79	43.54	2.43	64.75	65.11	0.430
2900	1.77	34.72	27.79	43.18	2.48	64.80	65.17	0.430
3000	1.76	34.73	27.80	43.29	2.52	64.63	65.02	0.430
3100	1.77	34.73	27.79	43.71	2.56	64.55	64.94	0.430
3200	1.77	34.72	27.79	44.34	2.60	64.68	65.09	0.430
3300	1.78	34.72	27.79	45.03	2.65	64.53	64.95	0.430
3400	1.78	34.73	27.80	44.60	2.69	64.44	64.87	0.430
3500	1.79	34.74	27.80	44.50	2.74	64.07	64.52	0.440
3600	1.80	34.72	27.79	46.27	2.78	64.12	64.58	0.440
3700	1.80	34.71	27.78	47.39	2.83	63.87	64.34	0.440
3800	1.81	34.73	27.79	46.56	2.88	63.44	63.93	0.450
3900	1.81	34.71	27.77	48.49	2.92	63.70	64.20	0.440
4000	1.81	34.73	27.79	47.30	2.97	63.70	64.21	0.440
4100	1.81	34.70	27.77	49.26	3.02	62.58	63.13	0.460
4140	1.81	34.74	27.80	46.68	3.04	60.78	61.34	0.490



## WELOC 77 STA 78 15-JUN-77 0000 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
10	23.53	34.54	23.45	444.91	0.04	55.78	55.78	0.580
20	23.46	34.53	23.46	444.30	0.09	55.92	55.93	0.580
30	21.32	34.70	24.19	375.10	0.13	57.54	57.55	0.551
40	19.19	35.03	25.02	296.87	0.16	60.46	60.47	0.502
50	17.69	35.06	25.41	259.36	0.19	62.84	62.85	0.464
60	16.76	35.14	25.71	231.89	0.21	63.71	63.72	0.450
70	16.39	35.08	25.74	228.80	0.23	64.04	64.05	0.450
80	16.13	35.14	25.85	218.93	0.26	64.19	64.20	0.440
90	15.87	35.06	25.85	218.88	0.28	64.27	64.28	0.440
100	15.58	35.09	25.93	211.66	0.30	64.34	64.36	0.440
110	15.48	35.15	26.00	205.05	0.32	64.33	64.34	0.440
120	15.43	35.20	26.05	201.11	0.35	64.30	64.31	0.440
130	15.37	35.13	26.01	205.07	0.36	64.40	64.42	0.440
140	15.31	35.12	26.01	205.15	0.39	64.43	64.45	0.440
150	15.26	35.07	25.99	207.33	0.41	64.48	64.50	0.440
160	15.12	35.04	25.99	207.36	0.42	64.38	64.40	0.440
170	14.98	35.08	26.06	202.01	0.44	64.39	64.41	0.440
180	14.82	35.02	26.05	202.88	0.46	64.31	64.33	0.440
190	14.69	35.00	26.07	201.64	0.48	64.28	64.31	0.440
200	14.57	34.99	26.08	200.36	0.51	64.37	64.39	0.440
210	14.30	34.97	26.12	196.81	0.53	64.19	64.22	0.440
220	14.14	34.99	26.17	191.86	0.55	63.98	64.01	0.450
230	14.03	35.01	26.21	188.62	0.57	63.75	63.78	0.450
240	13.98	35.02	26.22	187.39	0.59	63.80	63.83	0.450
250	13.88	34.98	26.21	188.42	0.61	63.72	63.75	0.450
260	13.71	34.92	26.21	189.04	0.62	63.75	63.79	0.450
270	13.46	34.92	26.26	184.74	0.64	64.17	64.20	0.442
280	13.25	34.87	26.26	184.42	0.66	64.29	64.33	0.440
290	12.97	34.88	26.32	179.18	0.68	63.66	63.70	0.450
300	12.63	34.88	26.39	172.86	0.70	62.91	62.95	0.460
310	12.29	34.77	26.38	173.52	0.71	63.77	63.81	0.453
320	12.00	34.87	26.51	161.55	0.73	64.29	64.33	0.440
330	11.82	34.83	26.50	162.14	0.75	64.32	64.36	0.440
340	11.58	34.77	26.51	161.29	0.76	64.35	64.39	0.440
350	11.30	34.82	26.60	152.83	0.78	64.53	64.57	0.440
360	11.19	34.77	26.58	155.28	0.79	64.65	64.69	0.440
370	10.44	34.63	26.60	152.74	0.81	64.52	64.57	0.440
380	10.09	34.68	26.71	143.01	0.82	64.18	64.23	0.440
390	9.69	34.62	26.73	140.37	0.84	63.91	63.96	0.450
400	9.34	34.67	26.83	131.15	0.85	63.96	64.01	0.450
410	9.10	34.71	26.90	124.91	0.86	64.08	64.14	0.450
420	8.97	34.69	26.90	124.24	0.87	64.15	64.20	0.440
430	8.75	34.63	26.89	125.65	0.89	64.41	64.46	0.440
440	8.55	34.64	26.93	122.27	0.90	64.35	64.41	0.440
450	8.35	34.67	26.99	116.64	0.91	64.46	64.52	0.440
460	8.25	34.66	26.98	117.01	0.92	64.52	64.58	0.440
470	8.09	34.68	27.03	112.92	0.94	64.57	64.63	0.440
475	8.01	34.68	27.04	111.02	0.94	64.60	64.66	0.440



WELDC 77 STA 80 15-JUN-77 0630 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	22.67	34.68	23.81	410.77	0.04	56.02	56.02	0.580
20	21.96	34.49	23.86	405.98	0.08	57.62	57.62	0.550
30	18.99	35.00	25.05	293.48	0.12	61.98	61.98	0.481
40	18.46	34.98	25.15	283.03	0.14	62.35	62.35	0.473
50	17.52	34.86	25.29	270.03	0.17	62.75	62.76	0.467
60	16.83	35.07	25.62	239.55	0.20	63.77	63.77	0.450
70	16.69	35.09	25.69	234.47	0.22	63.83	63.84	0.450
80	16.60	35.13	25.72	230.57	0.24	63.96	63.97	0.450
90	16.40	35.09	25.75	228.59	0.27	64.20	64.21	0.442
100	16.13	35.07	25.79	224.28	0.29	64.21	64.22	0.440
110	16.00	35.11	25.85	219.81	0.31	64.40	64.41	0.440
120	15.85	35.07	25.85	219.66	0.34	64.65	64.66	0.440
130	15.77	35.11	25.90	215.14	0.36	64.66	64.68	0.440
140	15.70	35.06	25.89	217.11	0.38	64.59	64.61	0.440
150	15.61	35.04	25.89	216.91	0.40	64.59	64.61	0.440
160	15.41	34.97	25.88	218.25	0.42	64.73	64.75	0.440
170	15.19	35.00	25.96	211.26	0.44	64.70	64.72	0.440
180	14.99	35.01	26.00	207.20	0.46	64.54	64.56	0.440
190	14.86	35.03	26.05	203.05	0.48	64.61	64.63	0.440
200	14.75	34.96	26.01	206.69	0.50	64.29	64.31	0.440
210	14.46	34.83	25.98	210.02	0.52	64.26	64.28	0.440
220	14.15	35.00	26.17	191.69	0.54	64.06	64.09	0.450
230	14.11	35.00	26.19	190.80	0.56	63.91	63.94	0.450
240	14.00	34.91	26.14	195.81	0.58	63.68	63.71	0.450
250	13.62	34.84	26.16	193.09	0.60	63.57	63.60	0.450
260	13.21	34.90	26.29	181.05	0.62	63.70	63.74	0.450
270	13.05	34.90	26.32	178.22	0.64	63.67	63.71	0.450
280	12.86	34.87	26.33	177.07	0.65	64.19	64.23	0.440
290	12.71	34.96	26.44	167.60	0.67	64.19	64.23	0.440
300	12.45	34.83	26.39	172.59	0.69	63.65	63.69	0.450
310	11.95	34.82	26.49	163.66	0.71	64.37	64.41	0.440
320	11.75	34.88	26.57	156.28	0.73	64.63	64.67	0.440
330	11.63	34.85	26.56	156.10	0.73	64.68	64.72	0.440
340	11.49	34.79	26.55	158.26	0.76	64.74	64.79	0.433
350	11.24	34.78	26.58	154.75	0.77	64.75	64.79	0.440
360	10.94	34.77	26.63	150.58	0.79	64.72	64.76	0.440
370	10.77	34.77	26.65	147.73	0.80	64.73	64.78	0.440
380	10.52	34.68	26.63	150.61	0.81	64.74	64.79	0.440
390	10.27	34.72	26.71	143.56	0.83	64.61	64.66	0.440
400	10.10	34.66	26.69	145.24	0.85	64.96	65.01	0.430
410	9.77	34.60	26.71	144.04	0.86	64.91	64.96	0.430
420	9.45	34.62	26.78	137.23	0.87	64.36	64.41	0.440
430	9.28	34.67	26.84	131.06	0.89	64.48	64.54	0.440
440	9.11	34.59	26.80	135.07	0.90	64.60	64.66	0.440
450	8.88	34.60	26.84	130.56	0.91	64.78	64.83	0.430
460	8.58	34.56	26.86	128.65	0.92	64.62	64.68	0.440
470	8.23	34.61	26.95	119.62	0.93	64.18	64.24	0.440
480	8.00	34.68	27.05	111.57	0.95	64.16	64.22	0.440
490	7.95	34.64	27.02	113.62	0.96	63.75	63.82	0.450
500	7.85	34.60	27.00	115.41	0.97	64.09	64.15	0.442
600	7.08	34.59	27.11	105.97	1.08	65.15	65.22	0.430
700	6.39	34.59	27.20	98.14	1.18	65.11	65.20	0.430
800	5.89	34.61	27.28	90.99	1.28	65.10	65.20	0.430
900	5.30	34.56	27.31	88.32	1.37	65.14	65.25	0.430
1000	4.65	34.59	27.41	78.68	1.45	65.08	65.21	0.430

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	ZTRANS	POT TR	POT C
1100	4.25	34.60	27.47	73.19	1.53	65.13	65.27	0.430
1200	3.91	34.60	27.50	70.12	1.59	64.93	65.08	0.430
1300	3.54	34.62	27.55	65.50	1.67	64.39	64.56	0.440
1400	3.26	34.64	27.60	61.03	1.72	64.66	64.84	0.433
1500	3.00	34.63	27.61	59.41	1.79	64.98	65.17	0.430
1600	2.89	34.70	27.68	53.20	1.84	64.83	65.03	0.430
1700	2.72	34.69	27.68	52.89	1.89	64.03	64.25	0.440
1800	2.55	34.68	27.69	52.16	1.95	63.76	64.00	0.450
1900	2.45	34.72	27.74	47.84	2.00	64.03	64.27	0.440
1965	2.31	34.78	27.79	42.53	2.03	63.69	63.94	0.450



WELOC 77 STA 82 15-JUN-77 0845 DN CAST

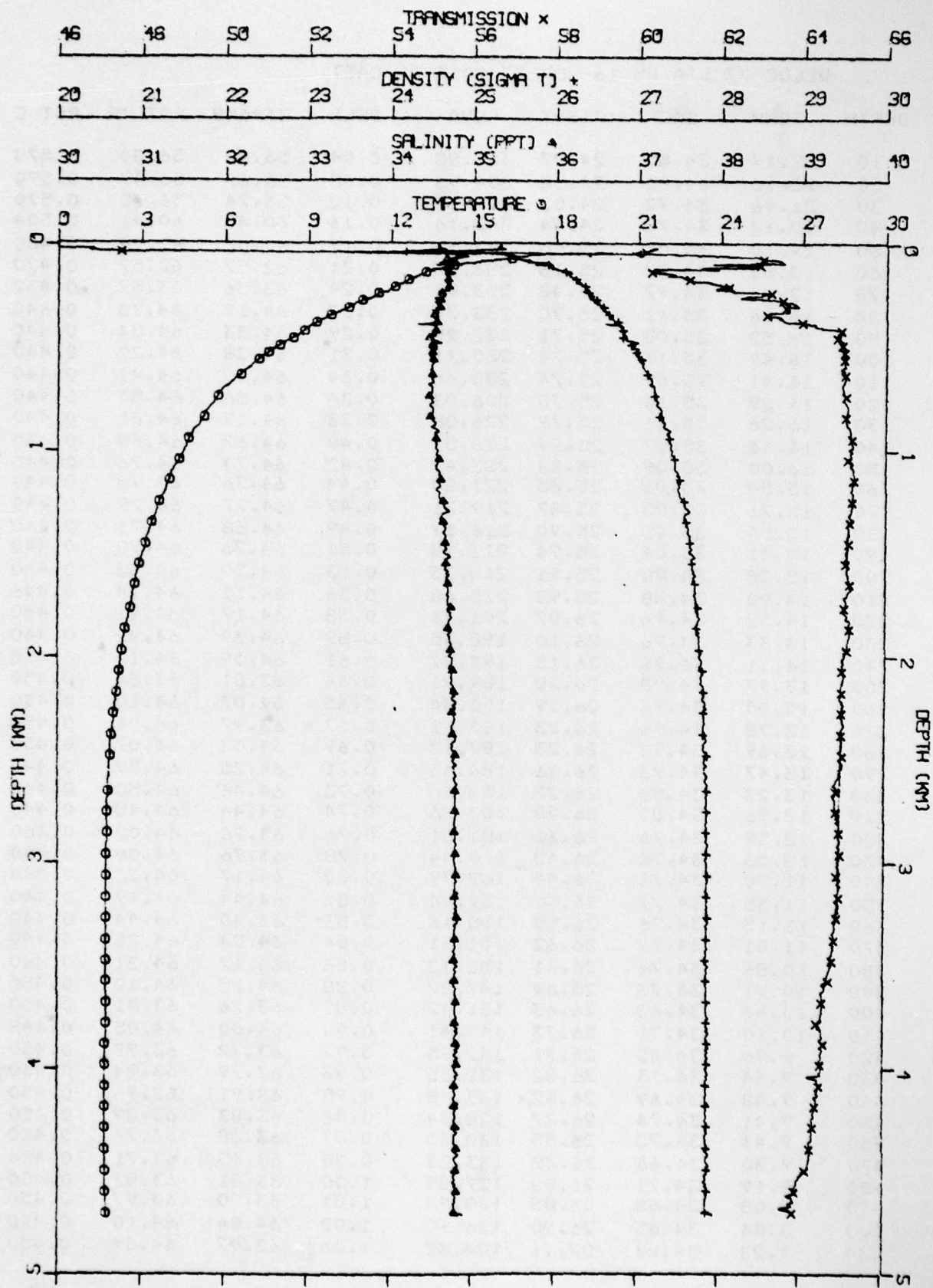
DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	22.25	34.75	23.98	394.19	0.05	54.88	54.88	0.600
20	22.24	34.75	23.99	394.18	0.08	54.90	54.90	0.600
30	21.96	34.81	24.11	383.29	0.12	55.96	55.97	0.581
40	19.67	34.70	24.63	333.13	0.16	60.93	60.93	0.494
50	18.56	34.96	25.12	287.37	0.18	62.26	62.26	0.477
60	17.56	34.89	25.31	269.09	0.21	62.64	62.65	0.468
70	16.95	35.08	25.61	241.13	0.24	63.64	63.65	0.450
80	16.85	35.13	25.67	235.65	0.26	63.74	63.75	0.450
90	16.71	35.08	25.66	236.76	0.29	63.97	63.98	0.450
100	16.41	35.08	25.73	230.55	0.31	64.19	64.20	0.444
110	16.17	35.08	25.78	225.88	0.33	64.45	64.46	0.440
120	16.04	35.11	25.85	220.24	0.35	64.64	64.66	0.440
130	16.01	35.10	25.84	220.93	0.38	64.65	64.67	0.440
140	15.85	35.06	25.85	220.32	0.40	64.63	64.65	0.440
150	15.63	35.06	25.90	216.13	0.41	64.69	64.71	0.440
160	15.47	35.10	25.97	209.75	0.44	64.72	64.74	0.440
170	15.26	35.03	25.95	210.78	0.46	64.63	64.65	0.440
180	15.17	35.04	25.99	208.50	0.48	64.51	64.53	0.440
190	15.08	35.04	26.01	207.51	0.50	64.44	64.47	0.440
200	14.94	34.97	25.98	209.45	0.52	63.99	64.01	0.450
210	14.61	34.84	25.95	212.53	0.55	63.98	64.00	0.450
220	14.27	34.96	26.13	196.45	0.56	63.89	63.92	0.450
230	14.10	34.93	26.13	195.98	0.58	63.08	63.11	0.460
240	13.87	34.89	26.15	194.32	0.60	63.05	63.08	0.460
250	13.59	34.94	26.25	185.63	0.62	63.59	63.62	0.451
260	13.50	34.98	26.29	181.31	0.64	63.74	63.77	0.450
270	13.44	34.86	26.22	188.64	0.66	63.83	63.86	0.450
280	13.14	34.73	26.18	192.61	0.68	63.92	63.95	0.450
290	12.73	34.81	26.32	179.21	0.69	64.26	64.29	0.440
300	12.47	34.83	26.39	172.85	0.71	64.00	64.04	0.450
310	12.33	34.88	26.46	166.56	0.73	63.88	63.92	0.450
320	12.00	34.75	26.42	169.93	0.75	64.02	64.06	0.450
330	11.57	34.82	26.56	157.05	0.76	63.67	63.71	0.450
340	11.32	34.81	26.59	154.14	0.78	63.45	63.49	0.455
350	11.23	34.76	26.57	156.49	0.80	63.40	63.44	0.460
360	11.10	34.81	26.63	150.92	0.81	63.30	63.35	0.460
370	10.91	34.76	26.62	151.33	0.82	63.18	63.23	0.460
380	10.77	34.74	26.64	149.82	0.84	62.96	63.01	0.460
390	10.34	34.55	26.56	157.24	0.86	62.81	62.86	0.462
400	9.77	34.67	26.75	139.05	0.87	63.36	63.41	0.460
410	9.58	34.71	26.82	132.80	0.88	63.74	63.80	0.450
420	9.49	34.71	26.83	131.09	0.90	63.32	63.37	0.460
430	9.36	34.69	26.84	131.50	0.91	63.87	63.93	0.450
440	9.22	34.67	26.85	130.52	0.93	63.94	64.00	0.450
450	9.07	34.63	26.84	131.19	0.93	63.69	63.75	0.450
460	8.74	34.57	26.84	130.64	0.95	63.88	63.94	0.450
470	8.33	34.65	26.97	118.62	0.96	64.29	64.35	0.440
480	8.18	34.67	27.01	114.95	0.97	64.34	64.40	0.440
490	8.09	34.69	27.04	112.37	0.98	64.29	64.36	0.440
500	8.01	34.66	27.03	113.33	0.99	64.41	64.47	0.440
600	6.97	34.58	27.12	105.68	1.11	64.64	64.72	0.440
700	6.24	34.55	27.19	98.66	1.20	64.74	64.83	0.430
800	5.83	34.62	27.30	89.77	1.30	64.47	64.57	0.440
900	5.52	34.61	27.33	87.09	1.38	64.41	64.53	0.440
1000	4.82	34.61	27.42	78.85	1.47	63.66	63.79	0.450



DEPTH	TEMP	SAL	SIG-T	SVA	DELD	XTRANS	POT TR	POT C
997	4.68	34.62	27.43	77.08	1.47	63.74	63.87	0.450

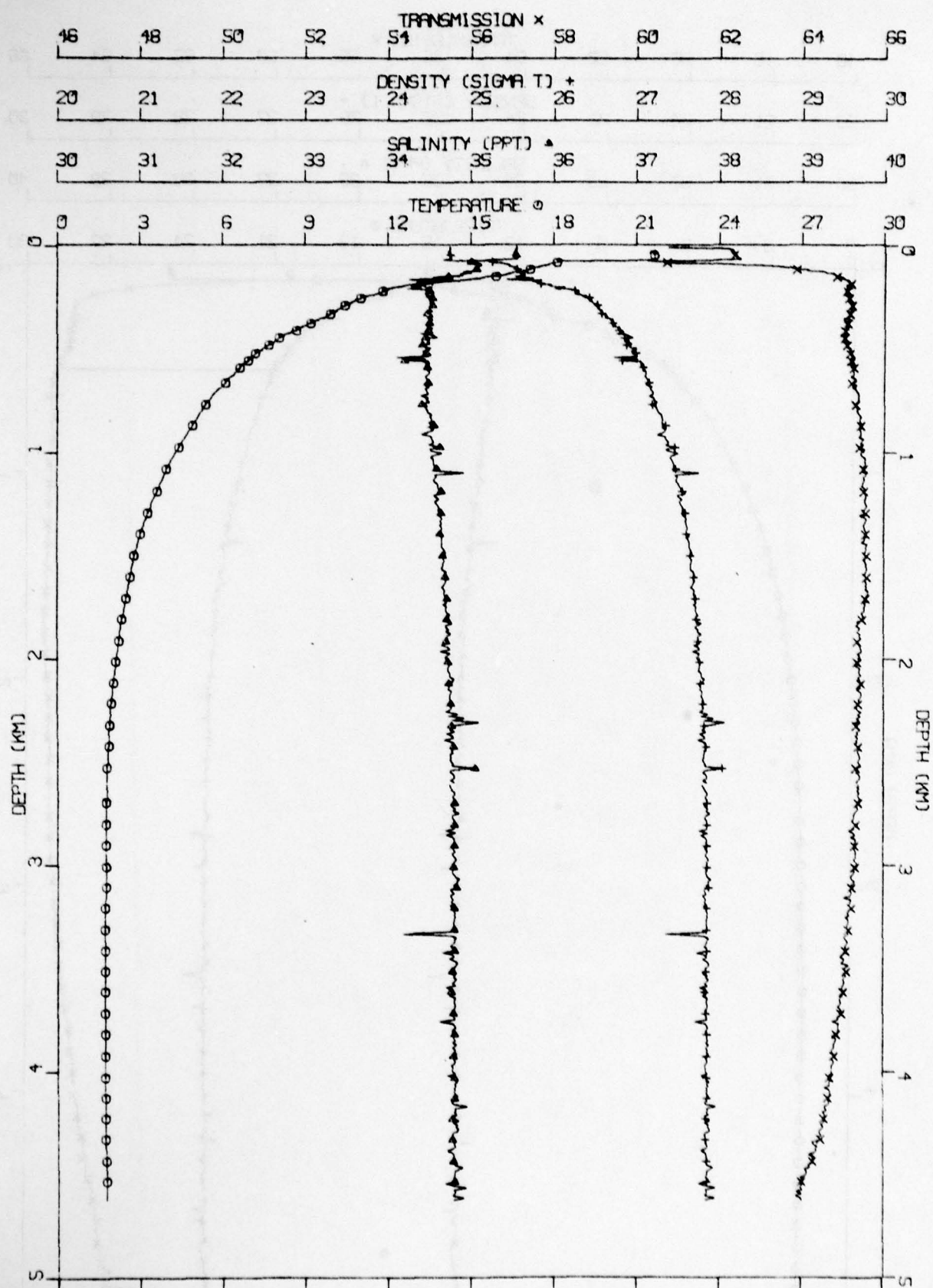
WELOC 77 STA 85 16-JUN-77 0015 DN CAST

DEPTH	TEMP	SAL	SIG-T	SVA	DELD	%TRANS	POT TR	POT C
10	22.19	34.85	24.07	385.88	0.04	56.80	56.80	0.570
20	22.16	34.86	24.08	384.93	0.08	56.67	56.67	0.570
30	21.96	34.72	24.03	390.08	0.12	56.74	56.75	0.570
40	20.12	34.73	24.54	342.14	0.16	60.40	60.41	0.504
50	19.10	35.05	25.05	293.56	0.19	62.07	62.08	0.480
60	18.50	34.99	25.16	283.83	0.21	62.57	62.57	0.470
70	17.14	34.97	25.48	253.95	0.24	63.56	63.57	0.452
80	16.66	35.11	25.70	233.33	0.27	64.19	64.20	0.440
90	16.52	35.08	25.71	232.29	0.29	64.33	64.34	0.440
100	16.49	35.11	25.74	230.11	0.31	64.28	64.29	0.440
110	16.41	35.09	25.74	230.46	0.34	64.40	64.41	0.440
120	16.29	35.10	25.78	226.83	0.36	64.56	64.57	0.440
130	16.26	35.11	25.79	226.08	0.38	64.59	64.61	0.440
140	16.16	35.07	25.79	226.57	0.40	64.67	64.68	0.440
150	16.00	35.09	25.83	222.47	0.42	64.74	64.76	0.440
160	15.84	35.06	25.85	221.20	0.44	64.76	64.78	0.440
170	15.71	35.05	25.87	219.21	0.47	64.77	64.79	0.440
180	15.55	35.05	25.90	216.17	0.49	64.68	64.71	0.440
190	15.41	35.06	25.94	213.15	0.51	64.76	64.78	0.440
200	15.28	34.98	25.91	216.35	0.53	64.50	64.52	0.440
210	14.90	34.88	25.92	215.60	0.56	64.11	64.14	0.446
220	14.52	34.96	26.07	201.71	0.58	64.19	64.21	0.440
230	14.33	34.96	26.10	198.65	0.59	64.39	64.42	0.440
240	14.11	34.96	26.15	193.97	0.61	64.09	64.11	0.450
250	13.97	34.98	26.20	189.91	0.64	63.81	63.84	0.450
260	13.90	34.96	26.19	190.44	0.65	64.07	64.10	0.450
270	13.78	34.96	26.23	187.61	0.67	63.97	64.01	0.450
280	13.69	34.96	26.23	187.13	0.69	64.03	64.07	0.450
290	13.47	34.93	26.26	184.65	0.71	64.25	64.29	0.440
300	13.23	34.88	26.27	184.66	0.73	64.46	64.50	0.440
310	12.96	34.81	26.28	183.76	0.74	64.44	64.48	0.440
320	12.58	34.76	26.31	181.01	0.76	63.98	64.02	0.450
330	12.03	34.76	26.42	170.44	0.78	63.96	64.00	0.450
340	11.70	34.71	26.44	167.79	0.80	64.17	64.22	0.440
350	11.35	34.77	26.55	157.44	0.81	64.44	64.49	0.440
360	11.15	34.76	26.58	155.16	0.83	64.40	64.44	0.440
370	11.01	34.77	26.62	151.81	0.84	64.24	64.28	0.440
380	10.86	34.74	26.61	152.12	0.86	64.17	64.21	0.440
390	10.71	34.73	26.64	149.87	0.88	64.05	64.10	0.450
400	10.46	34.65	26.63	151.47	0.89	63.76	63.81	0.450
410	10.10	34.71	26.73	141.41	0.90	64.00	64.05	0.448
420	9.90	34.65	26.71	142.95	0.92	63.92	63.97	0.450
430	9.64	34.73	26.82	132.85	0.93	63.79	63.84	0.450
440	9.48	34.69	26.82	133.28	0.95	63.91	63.96	0.450
450	9.41	34.74	26.87	128.44	0.96	63.83	63.89	0.450
460	9.41	34.72	26.85	130.35	0.97	63.68	63.74	0.450
470	9.30	34.66	26.82	133.23	0.98	63.65	63.71	0.450
480	9.19	34.71	26.88	127.85	1.00	63.81	63.87	0.450
490	9.08	34.65	26.85	130.93	1.01	63.90	63.97	0.450
500	8.84	34.65	26.90	126.90	1.02	64.04	64.10	0.450
534	7.23	34.63	27.11	104.32	1.06	63.97	64.04	0.450



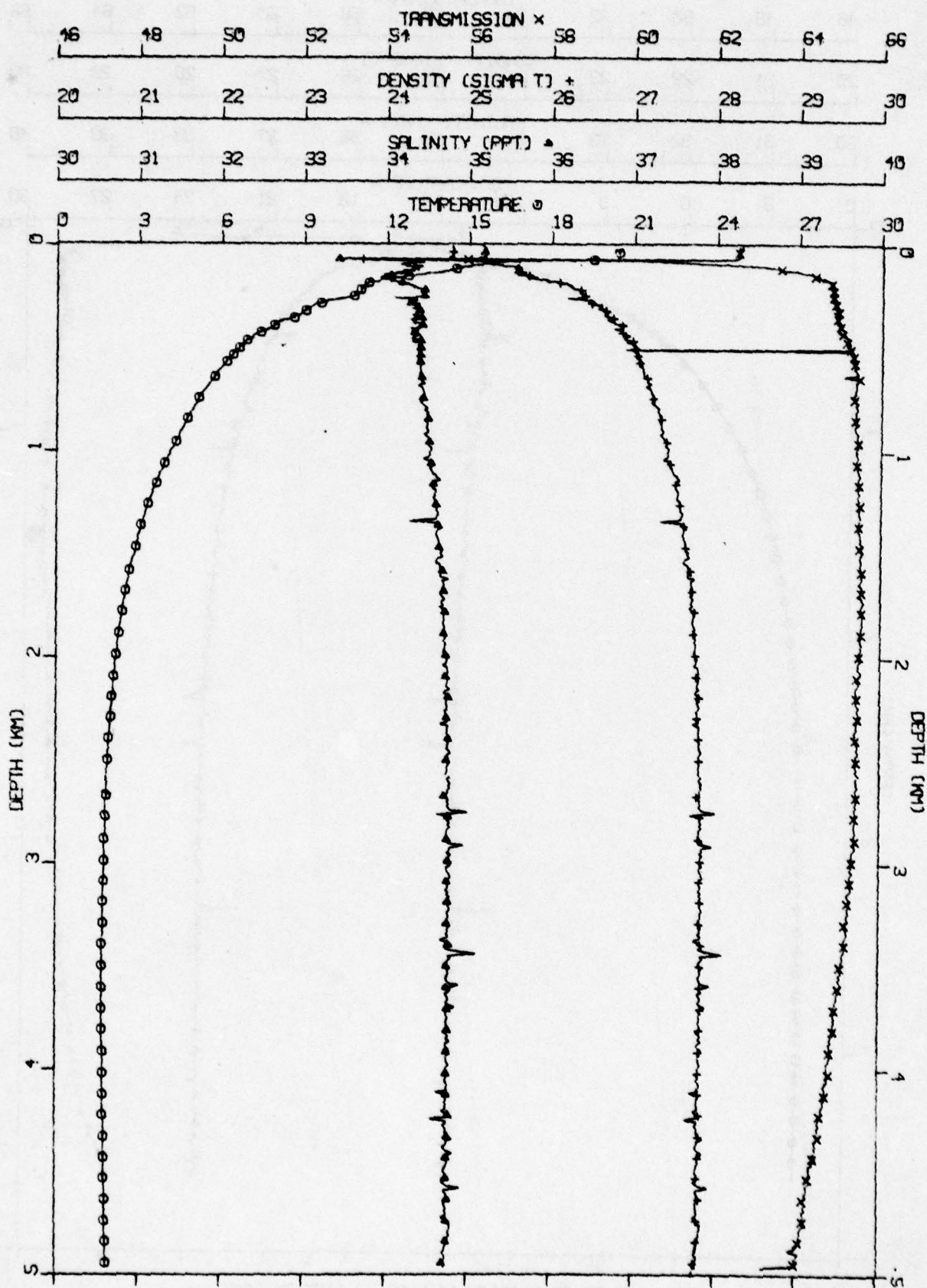
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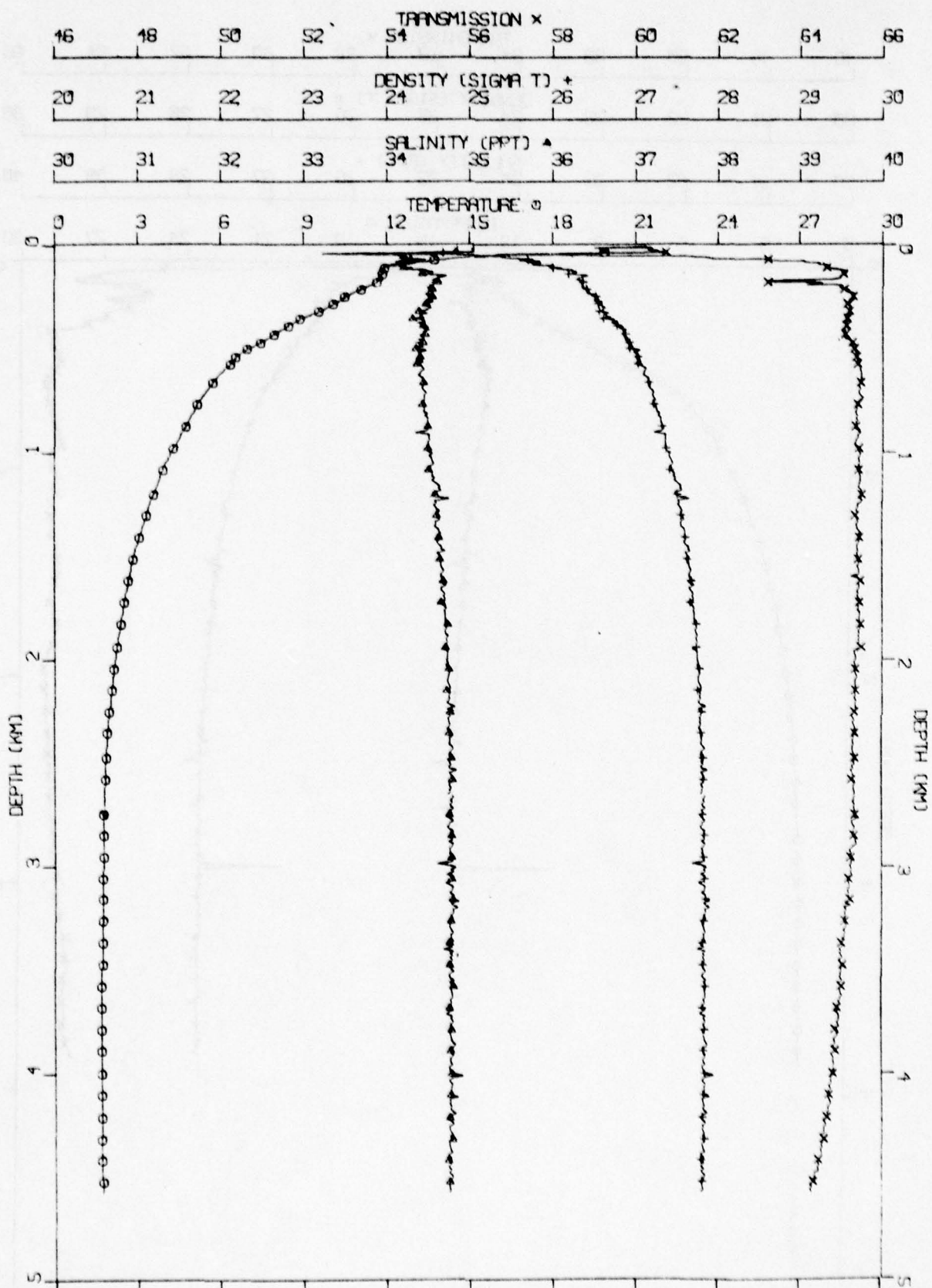


WELC 77 STATION 13 5-25-77 1100 ON CAST

65

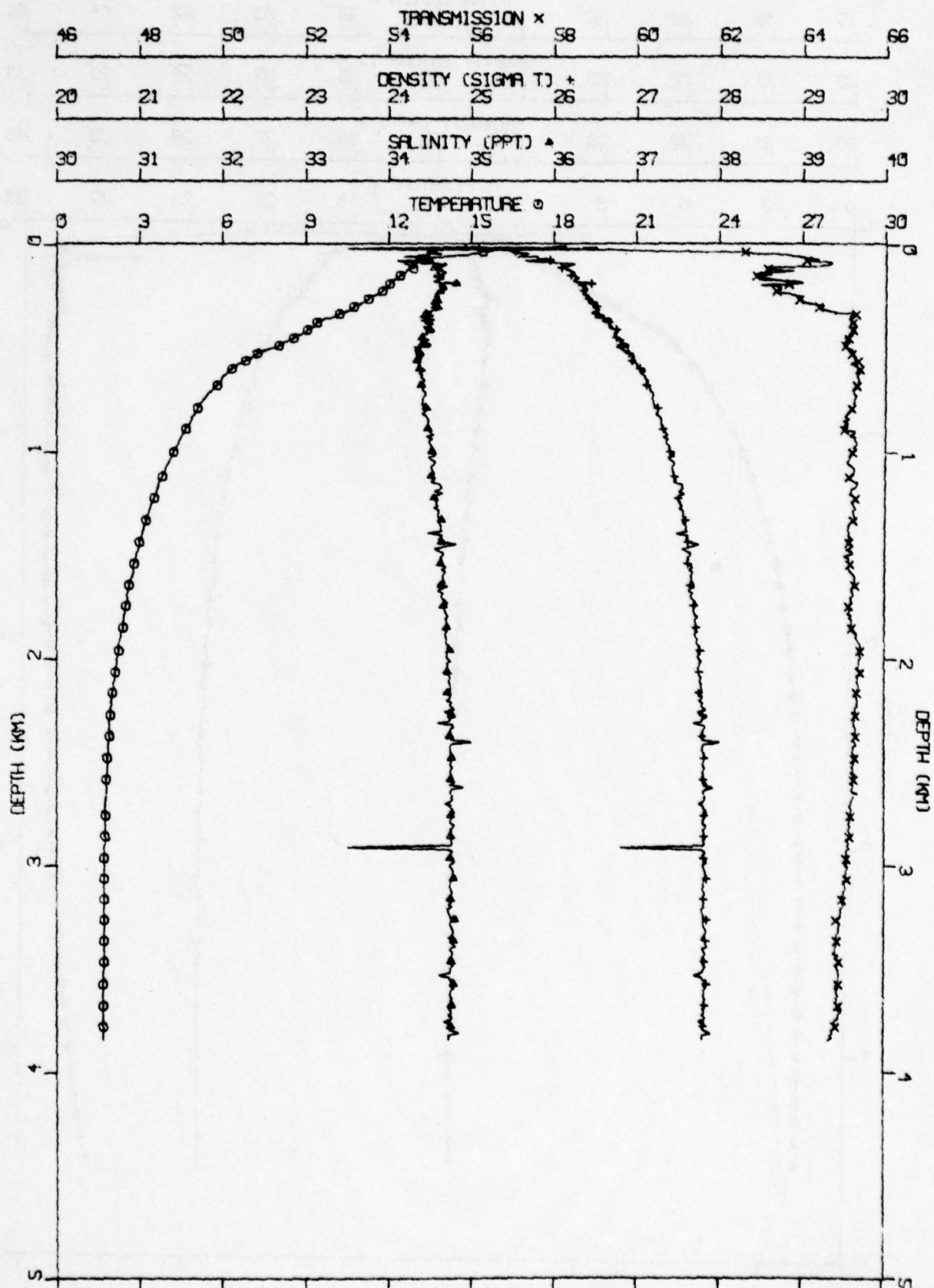


WELC 77 STATION 14B S-27-77 0800 ON CAST

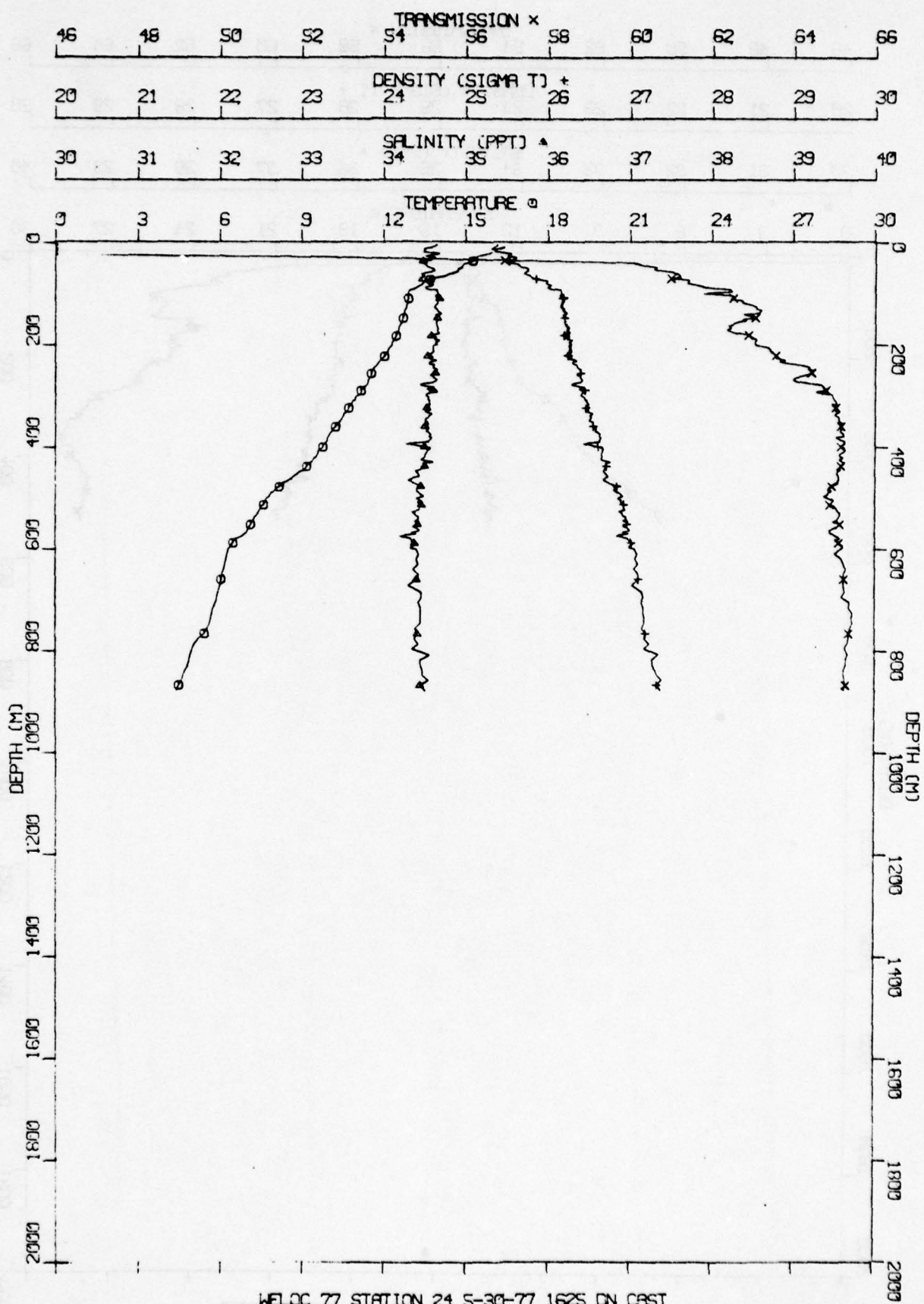


WELCC 77 STATION 16 5-28-77 1950 ON CAST

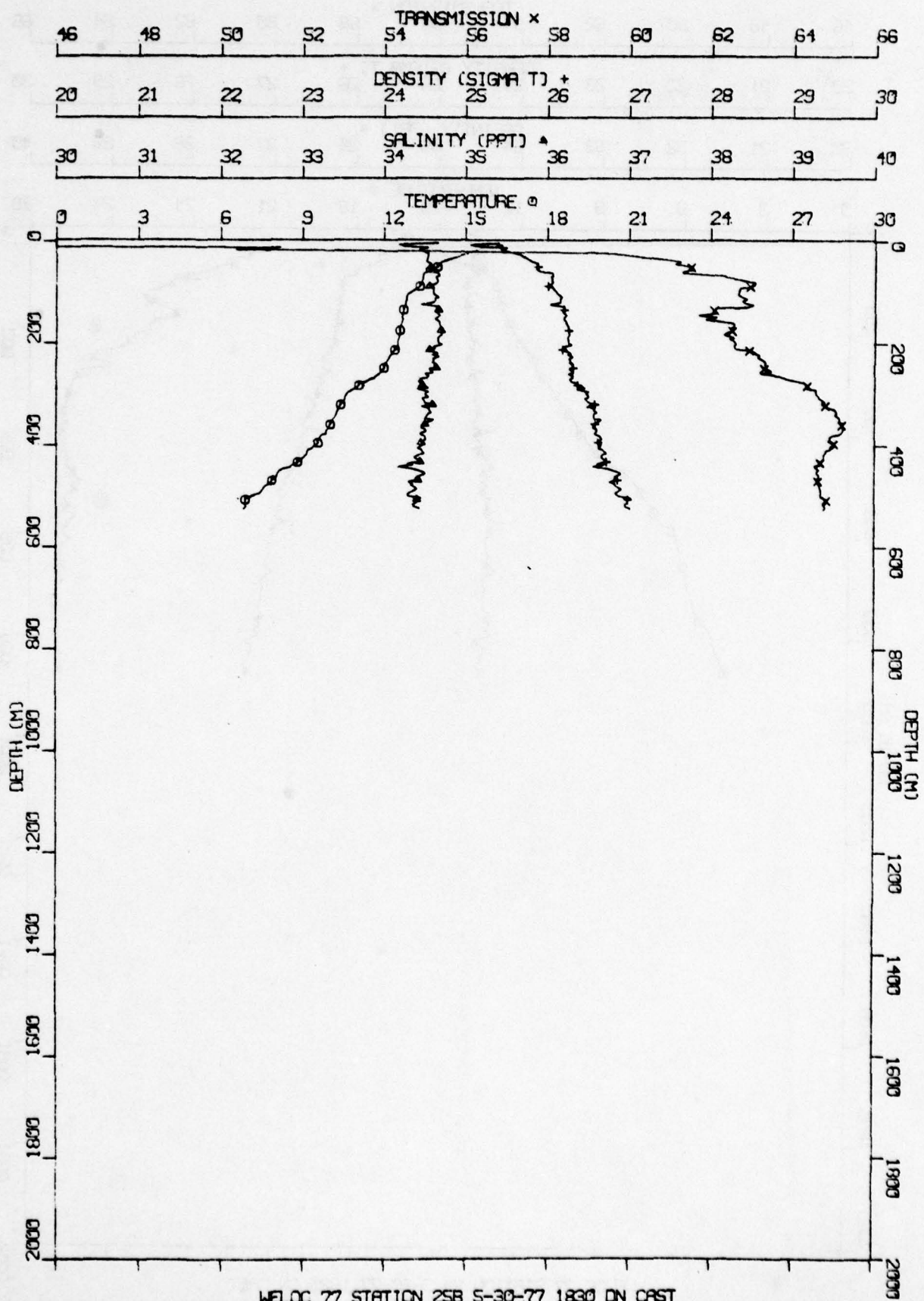




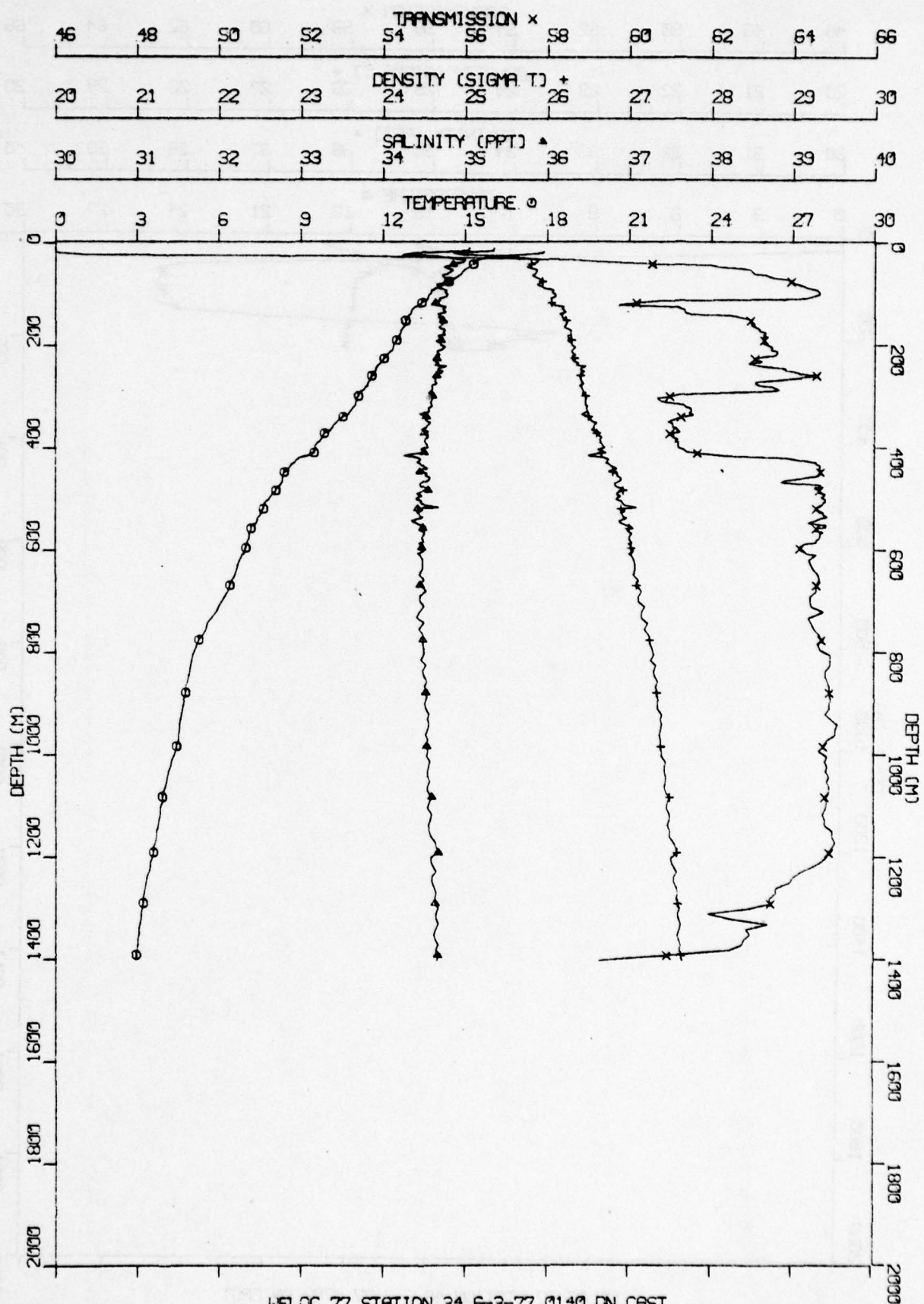
WELC 77 STATION 21 5-30-77 0005 DN CAST

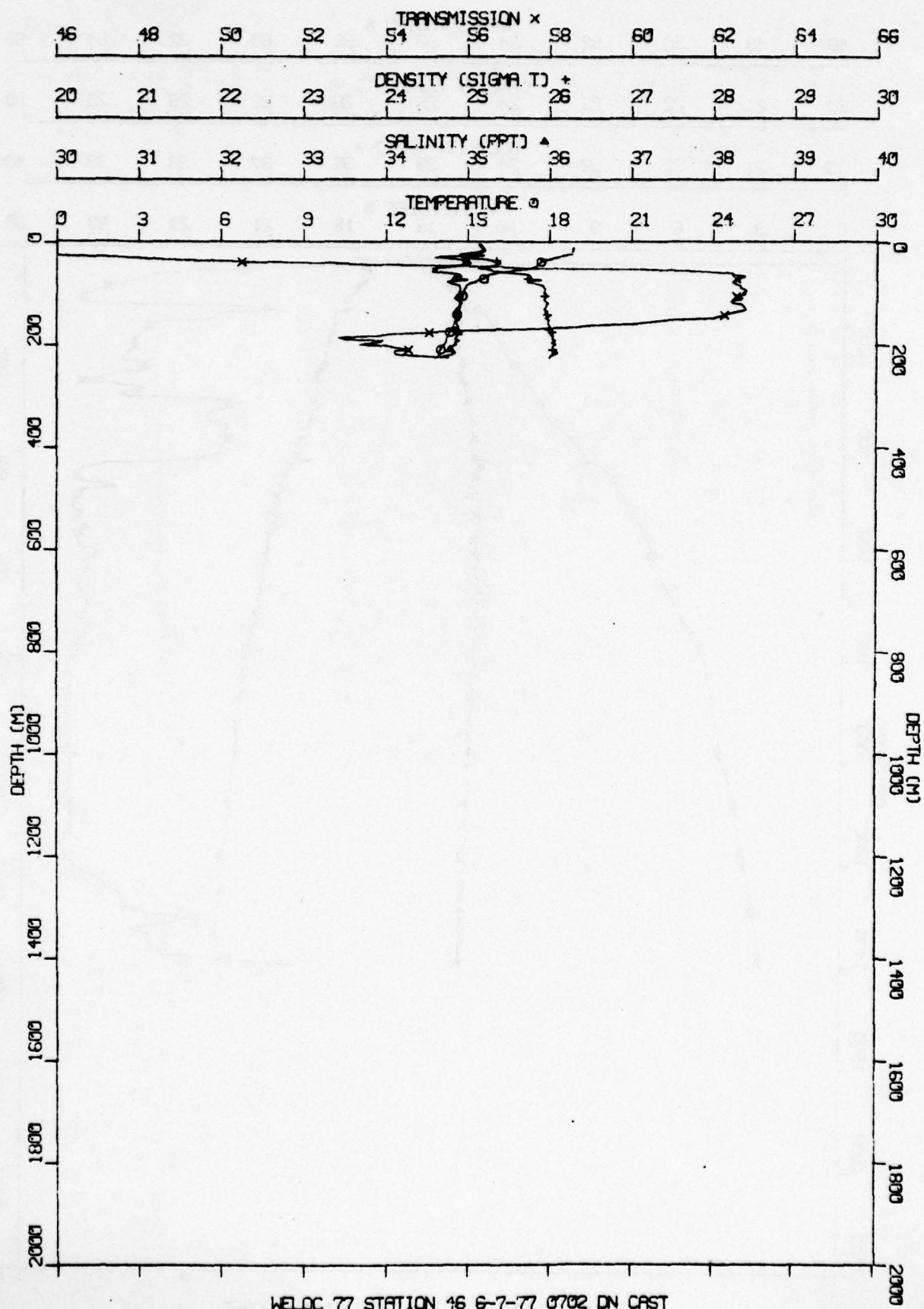


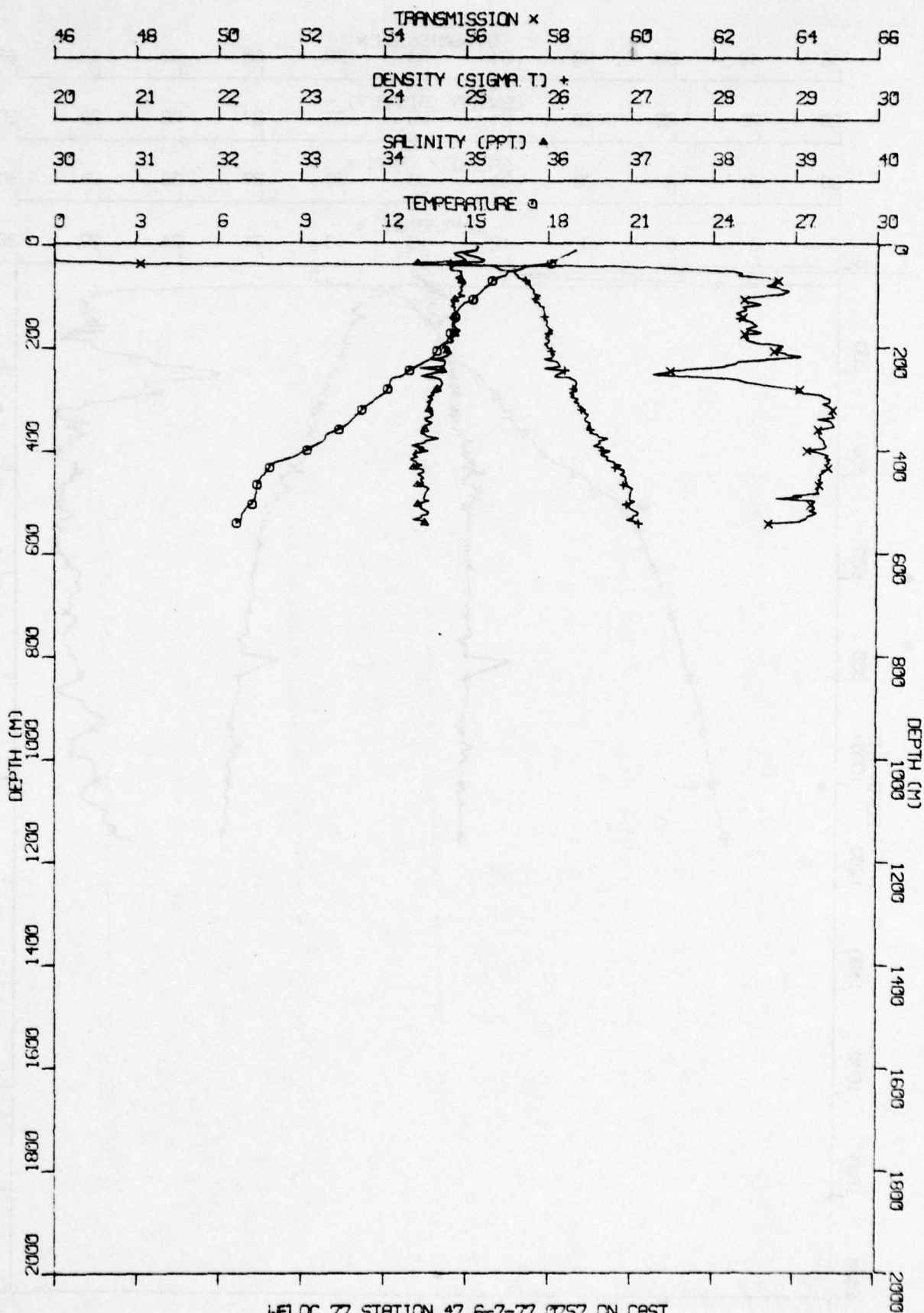
WELC 77 STATION 24 5-30-77 1625 DN CAST



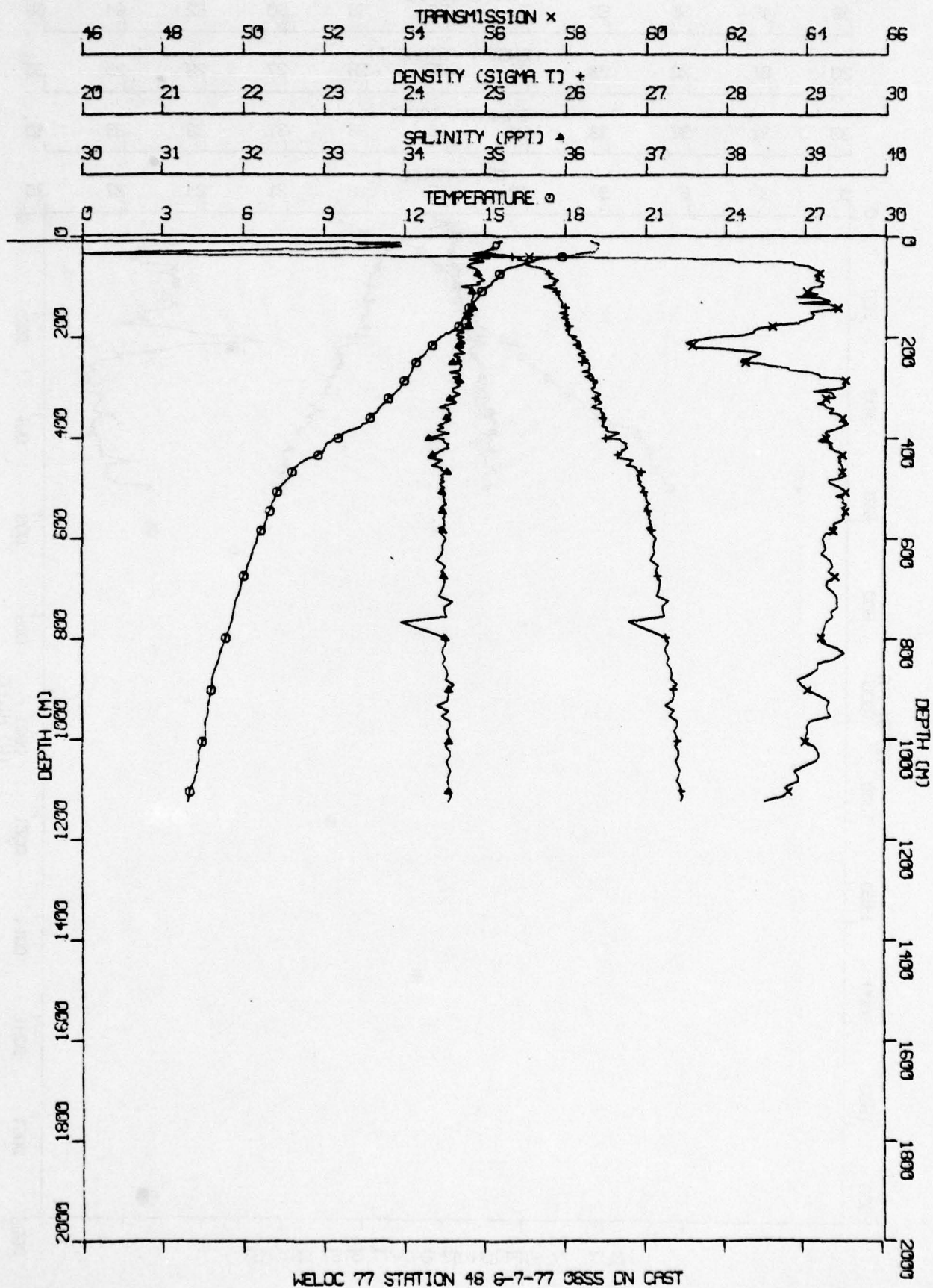


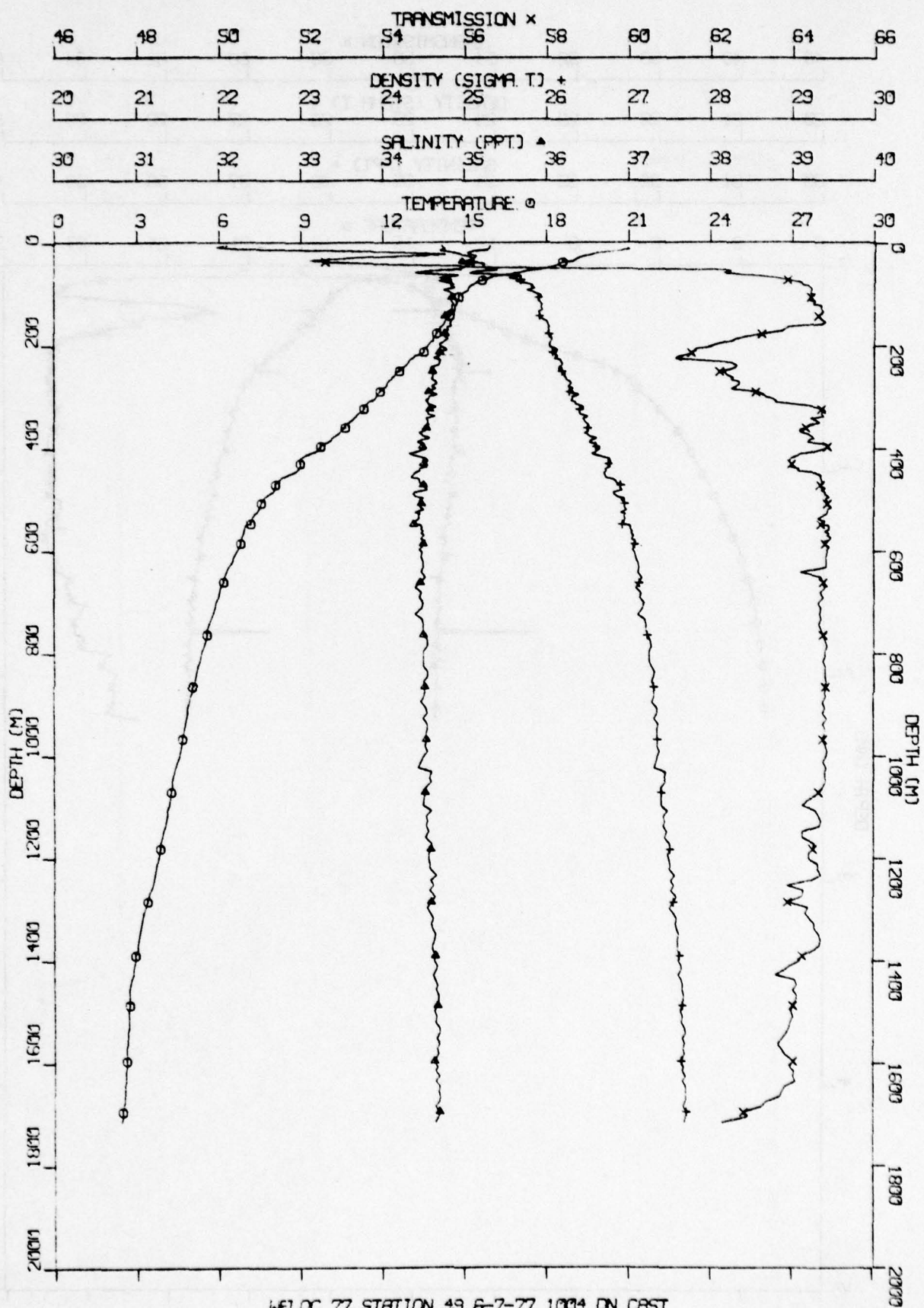


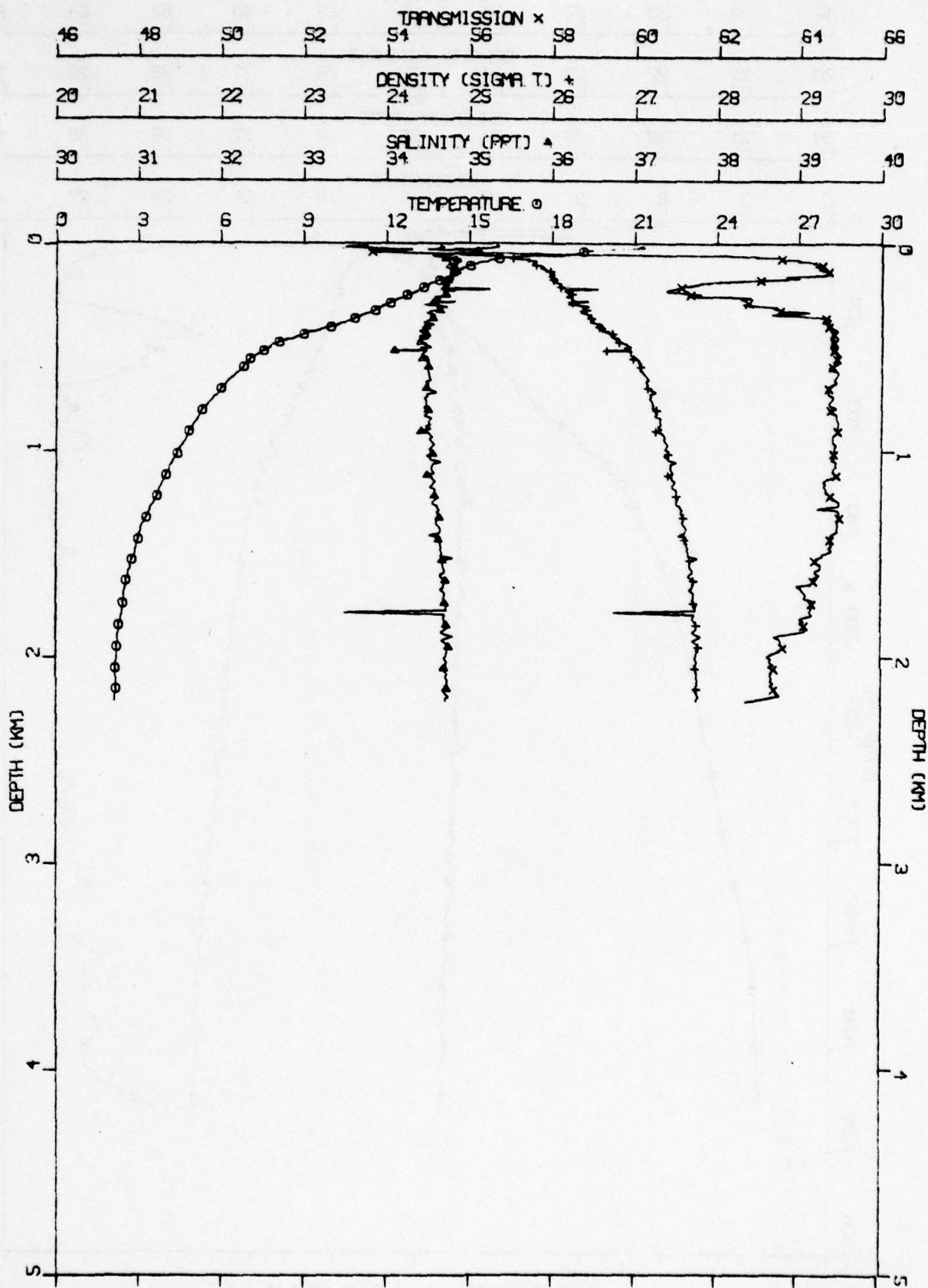






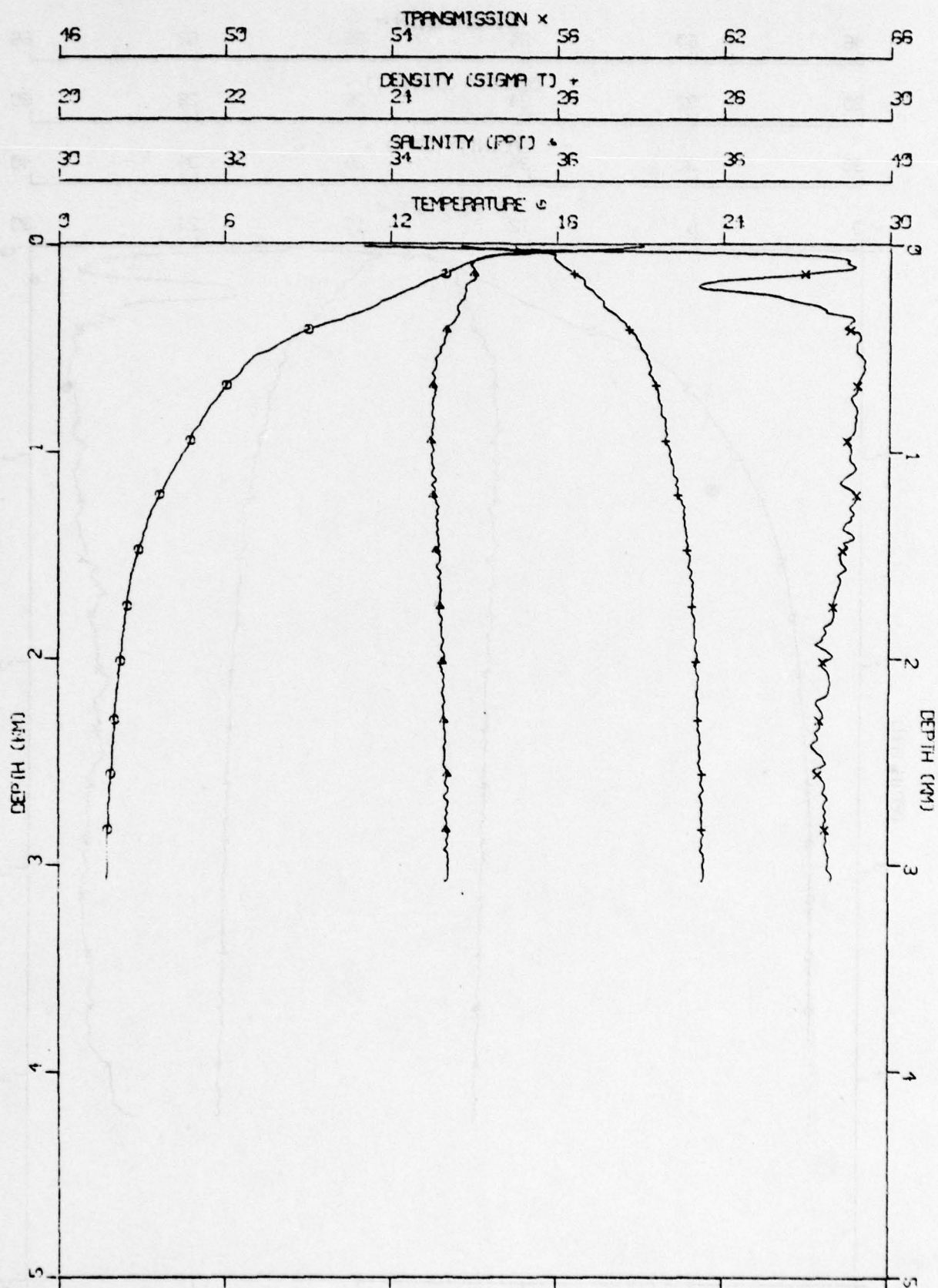




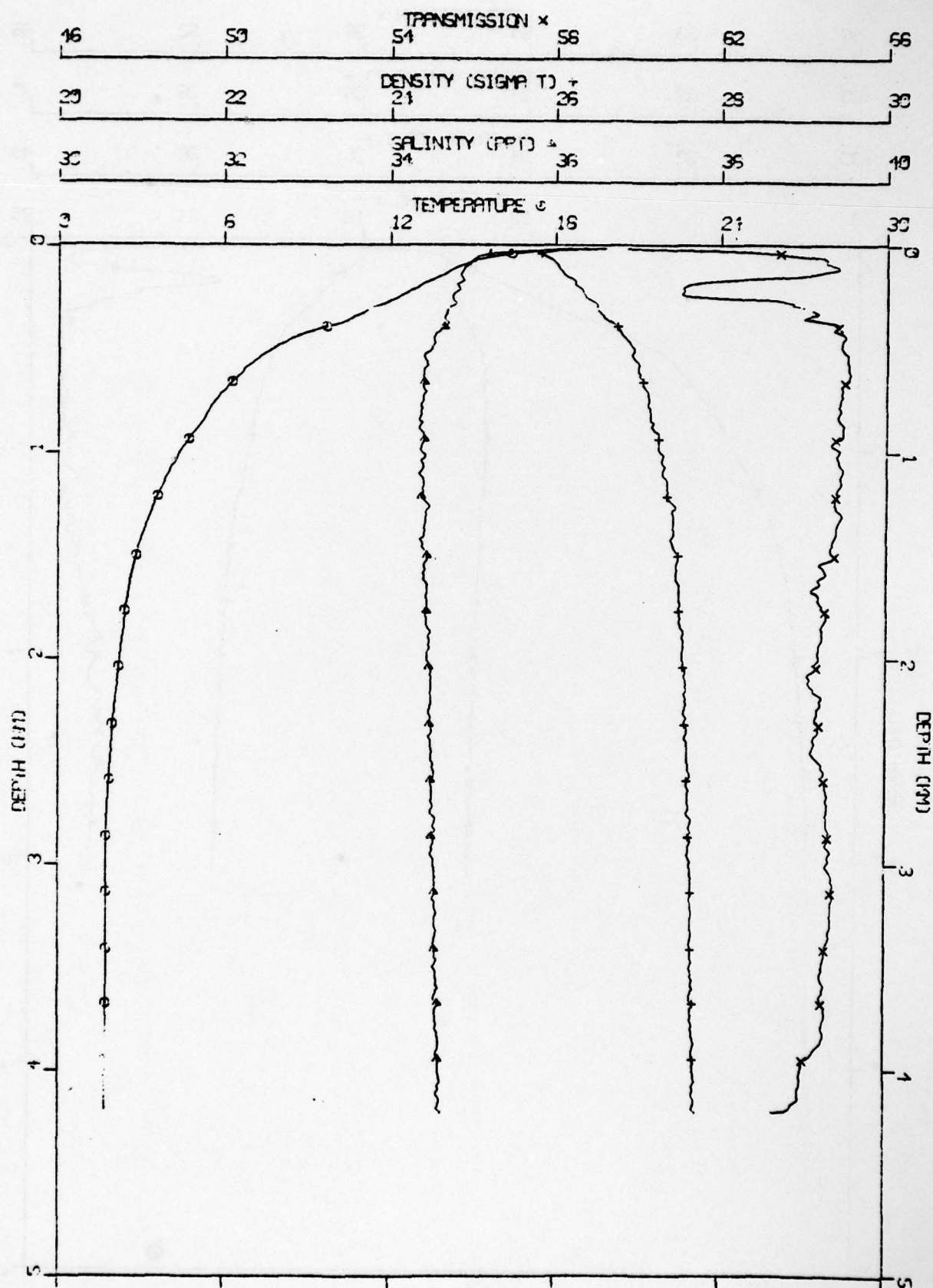


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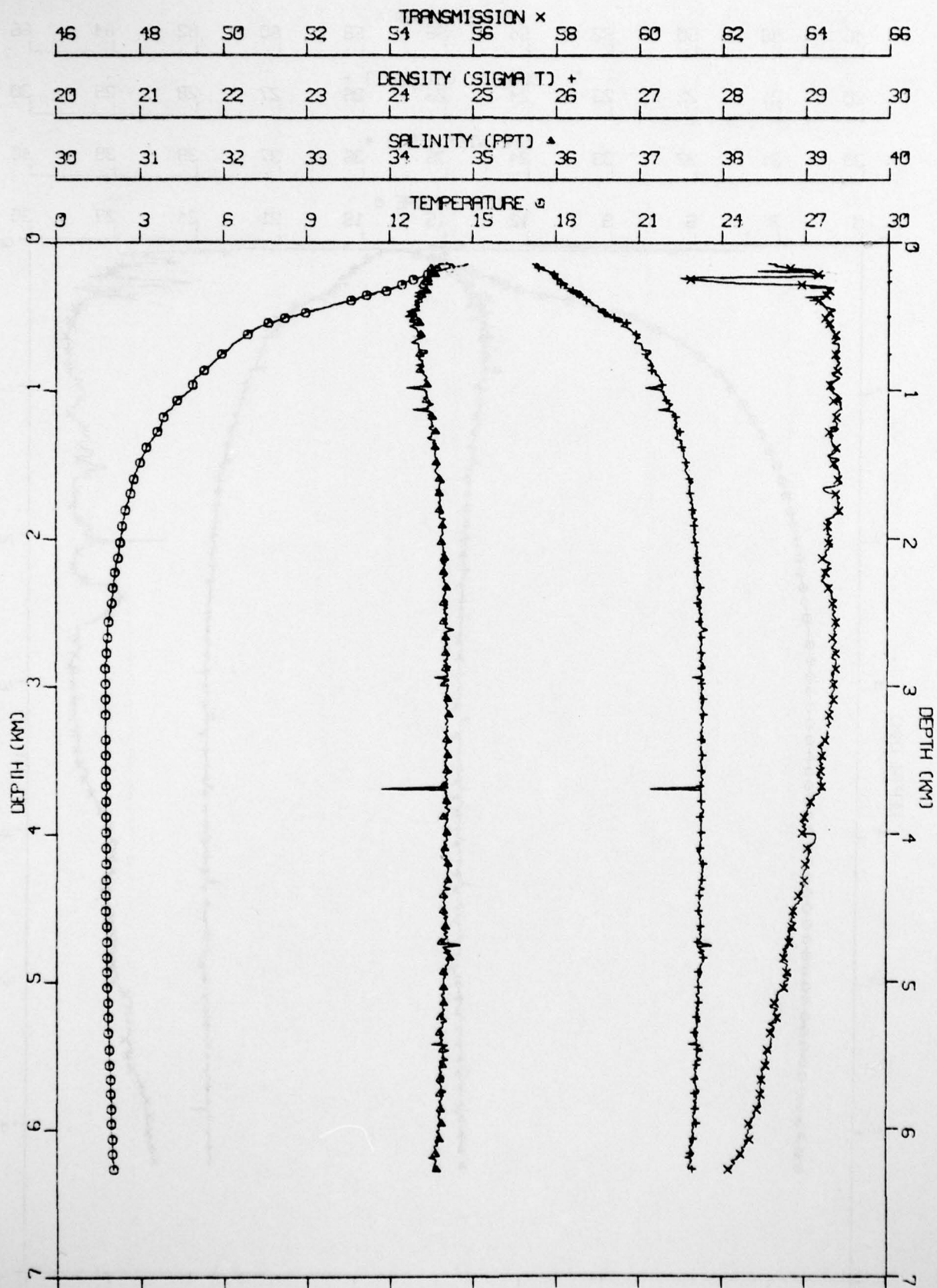




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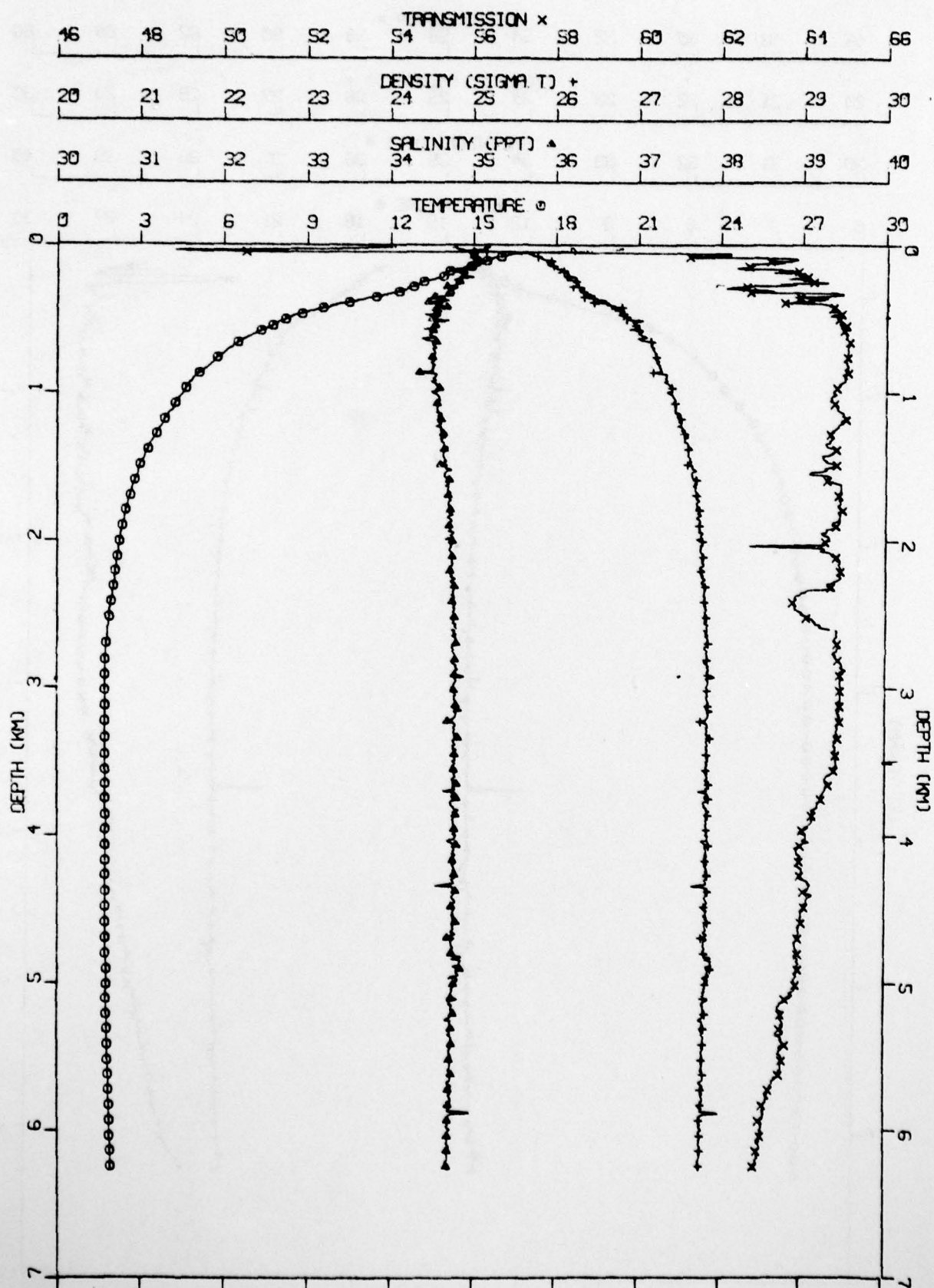


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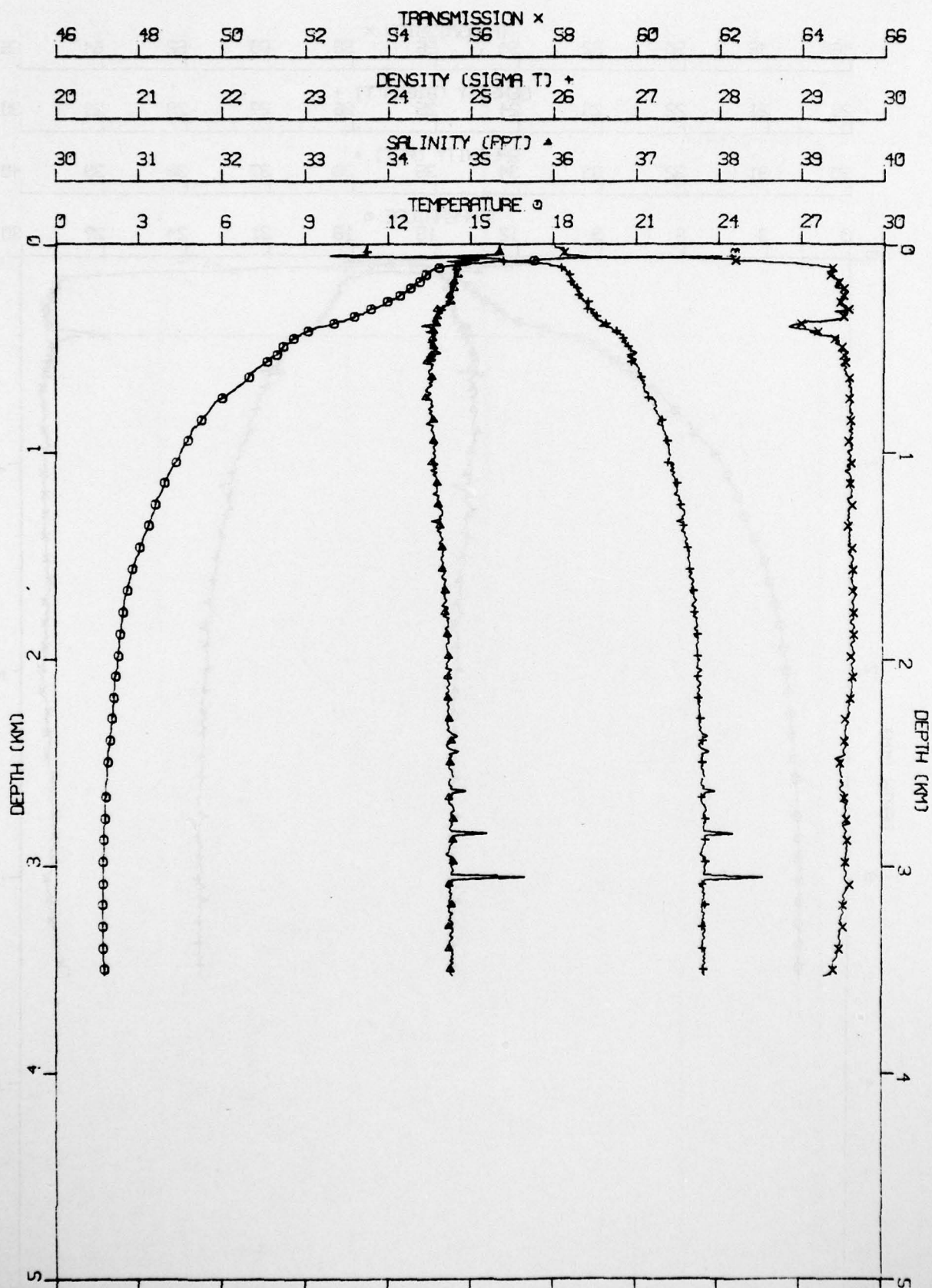


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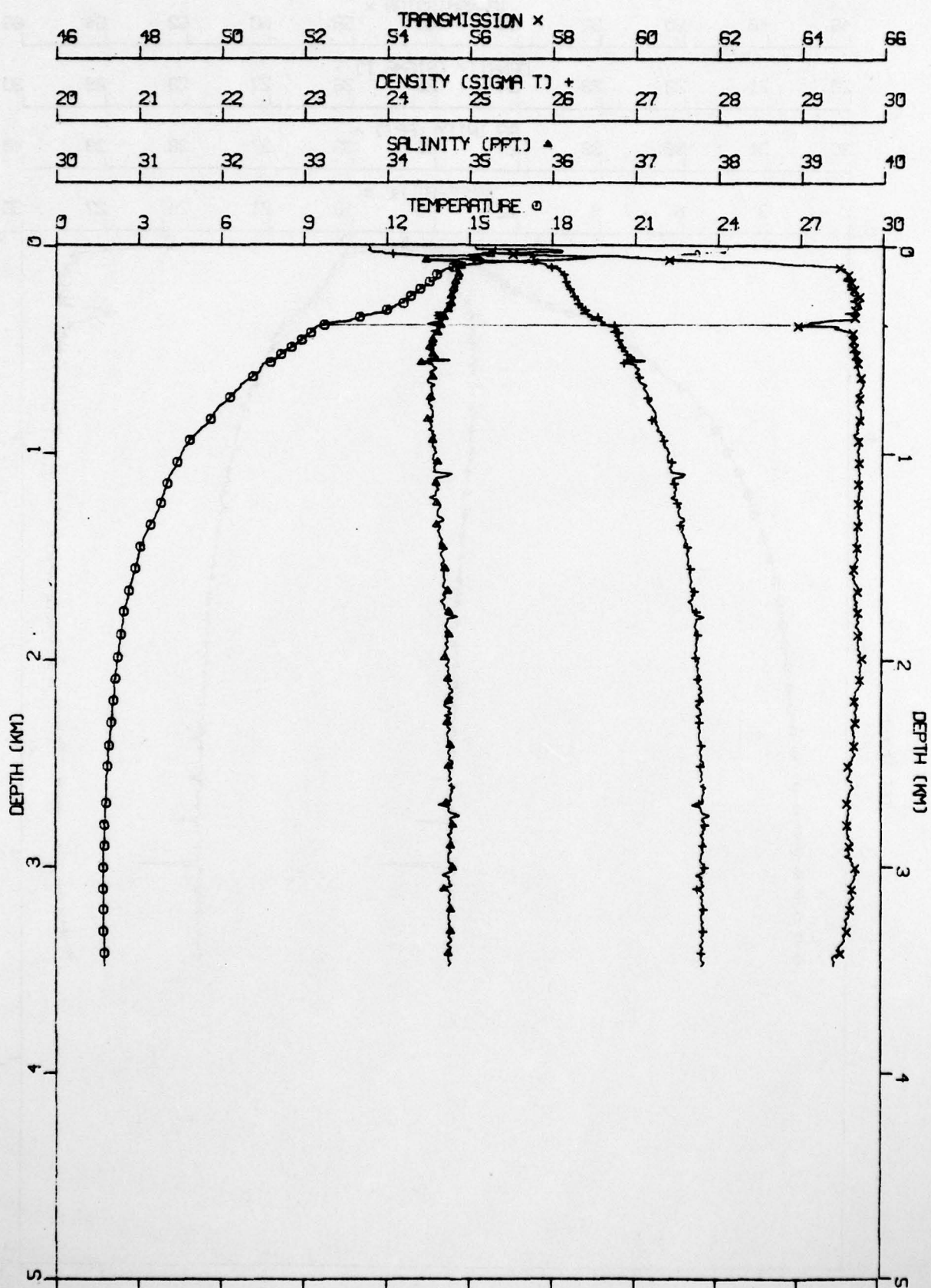




WELOC 77 STATION 63 6-9-77 1230 ON CRST

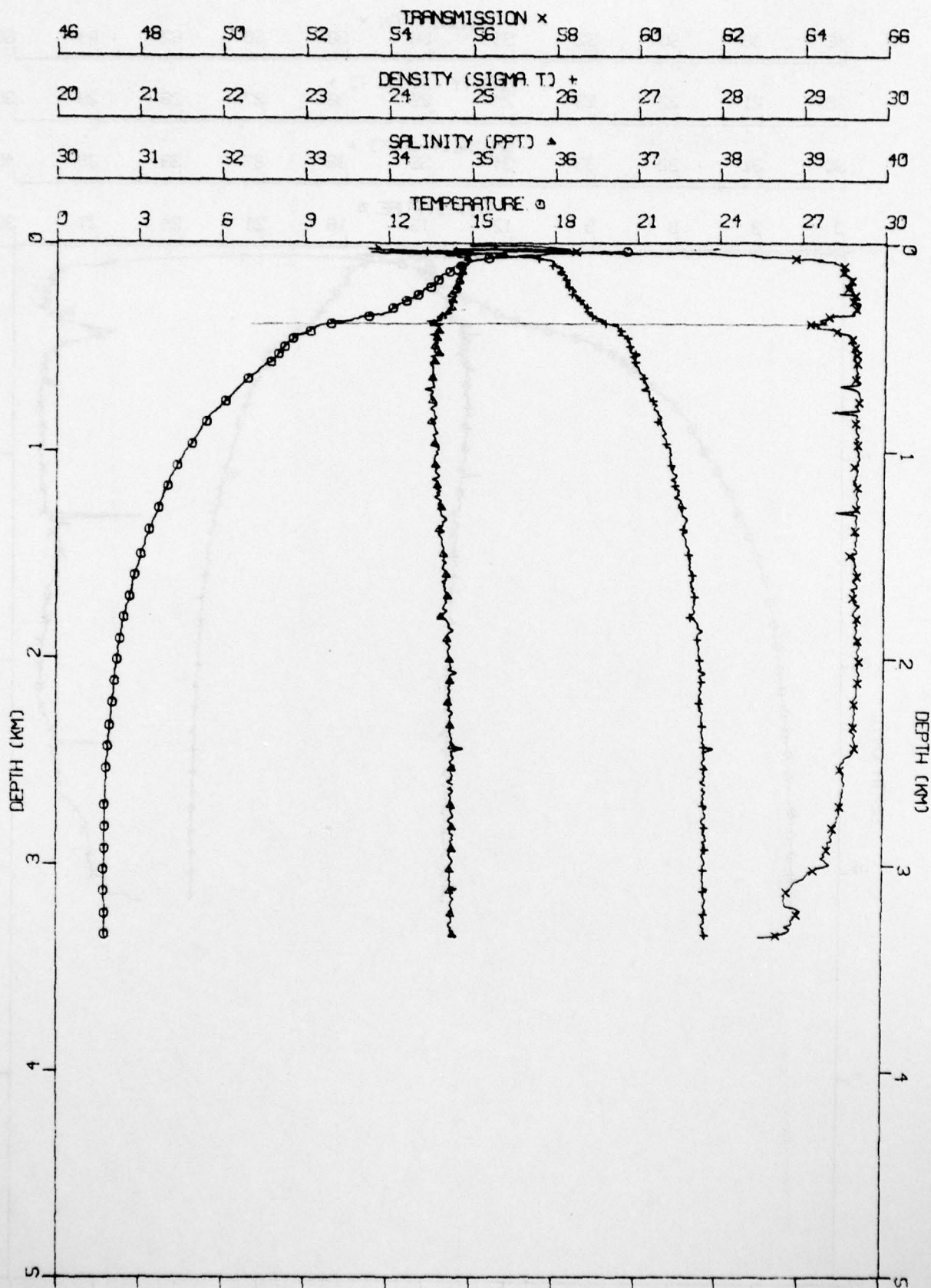


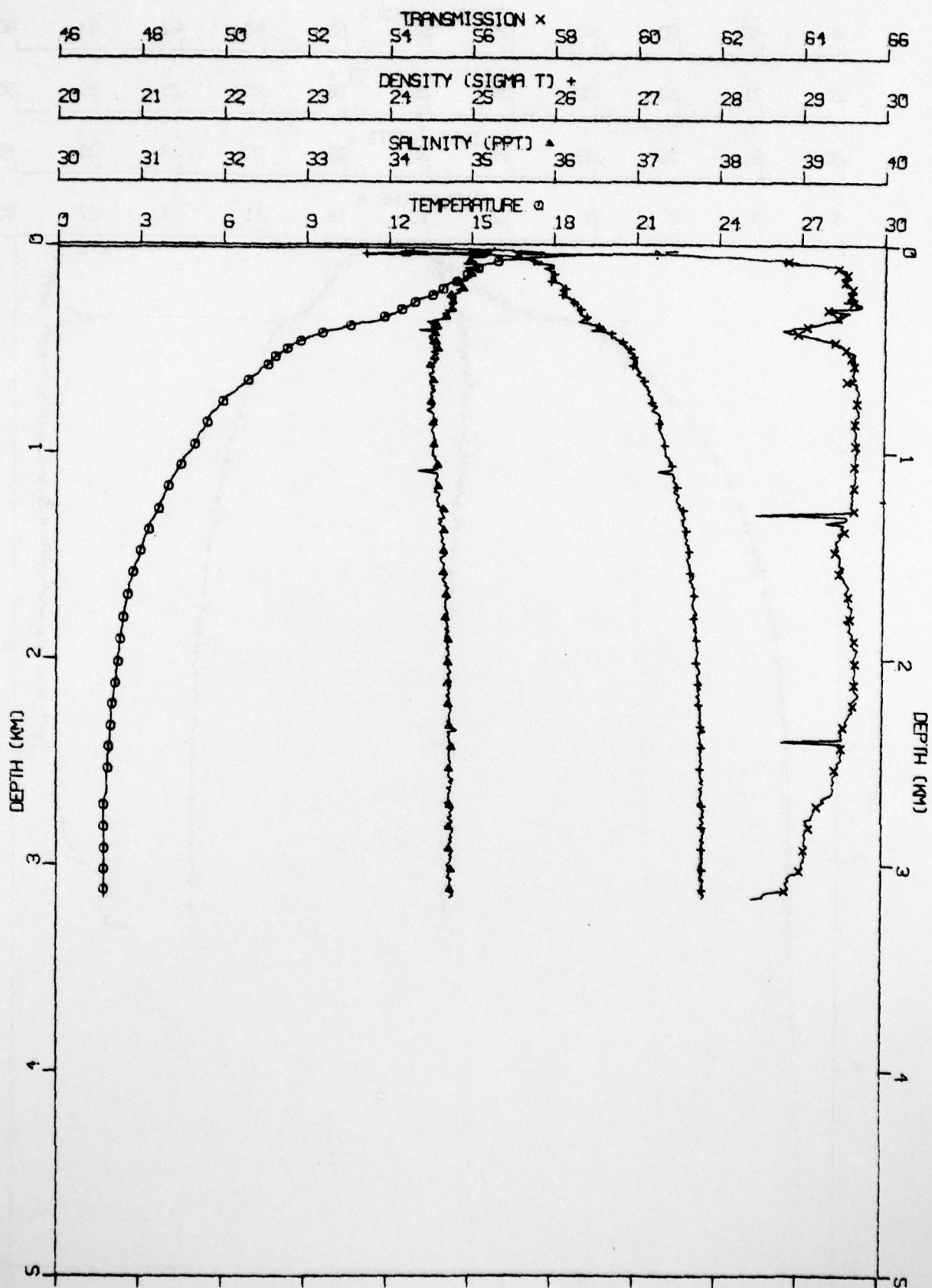
WELC 77 STATION 68 6-13-77 0140 ON CAST



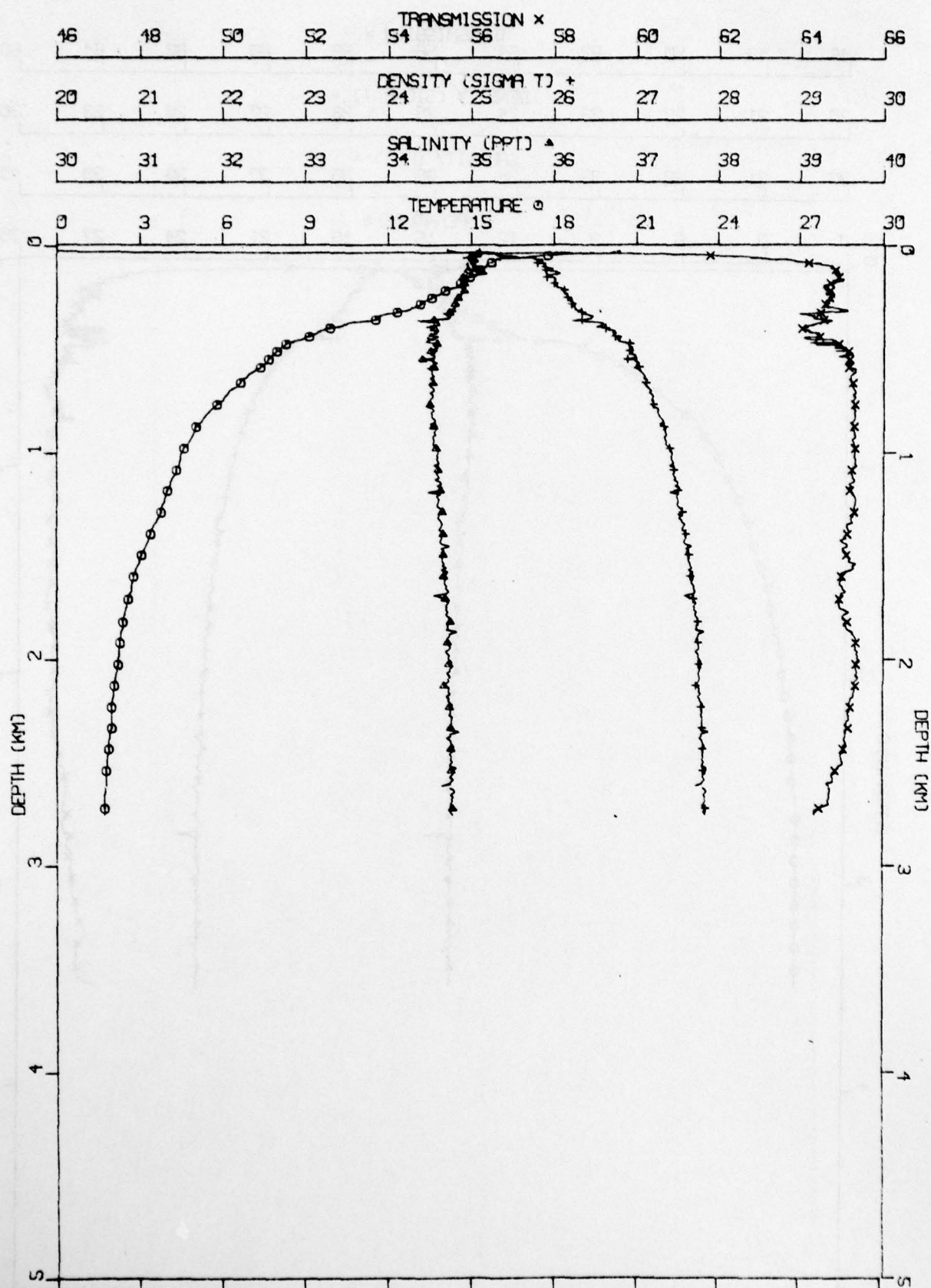
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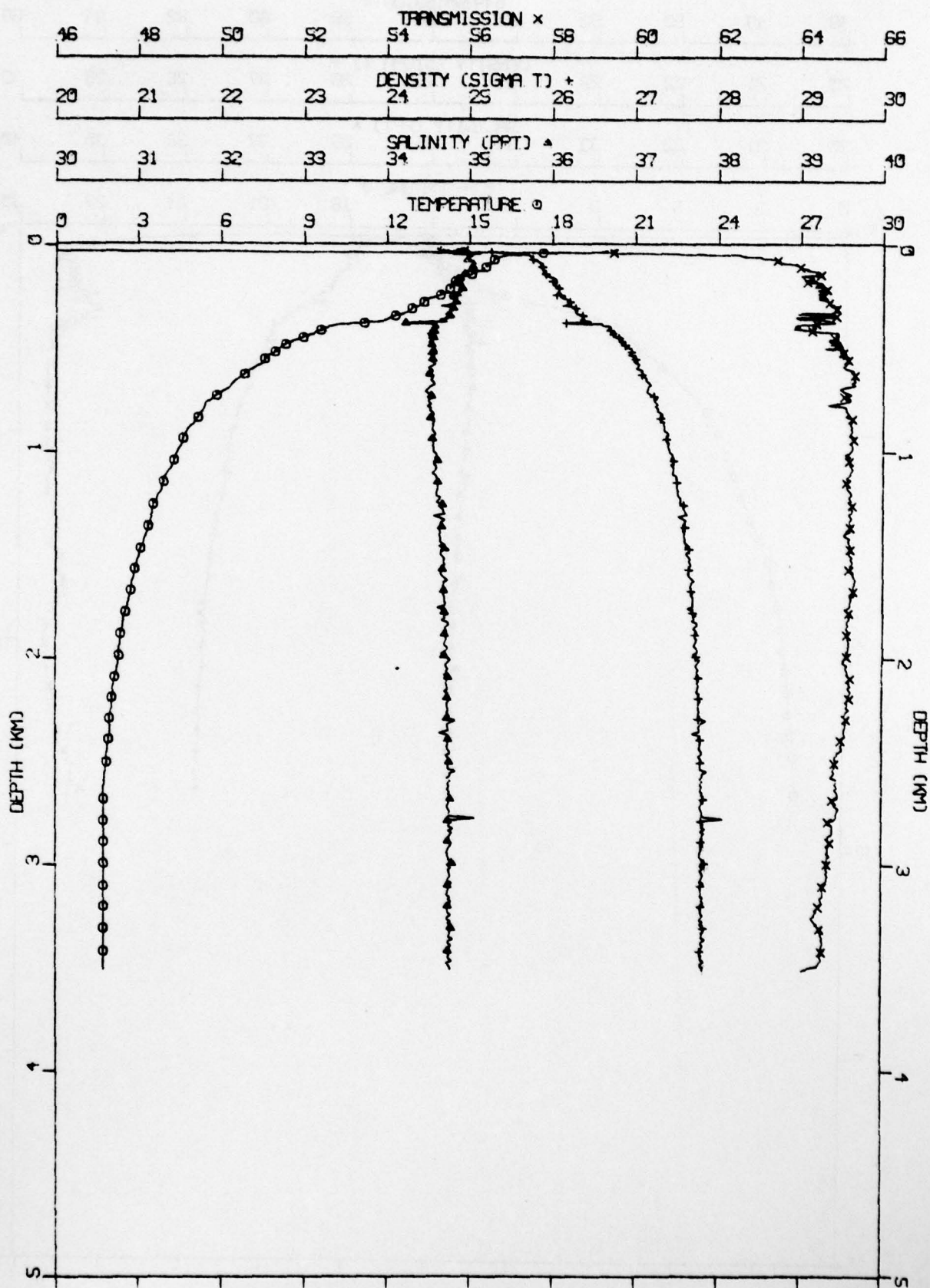


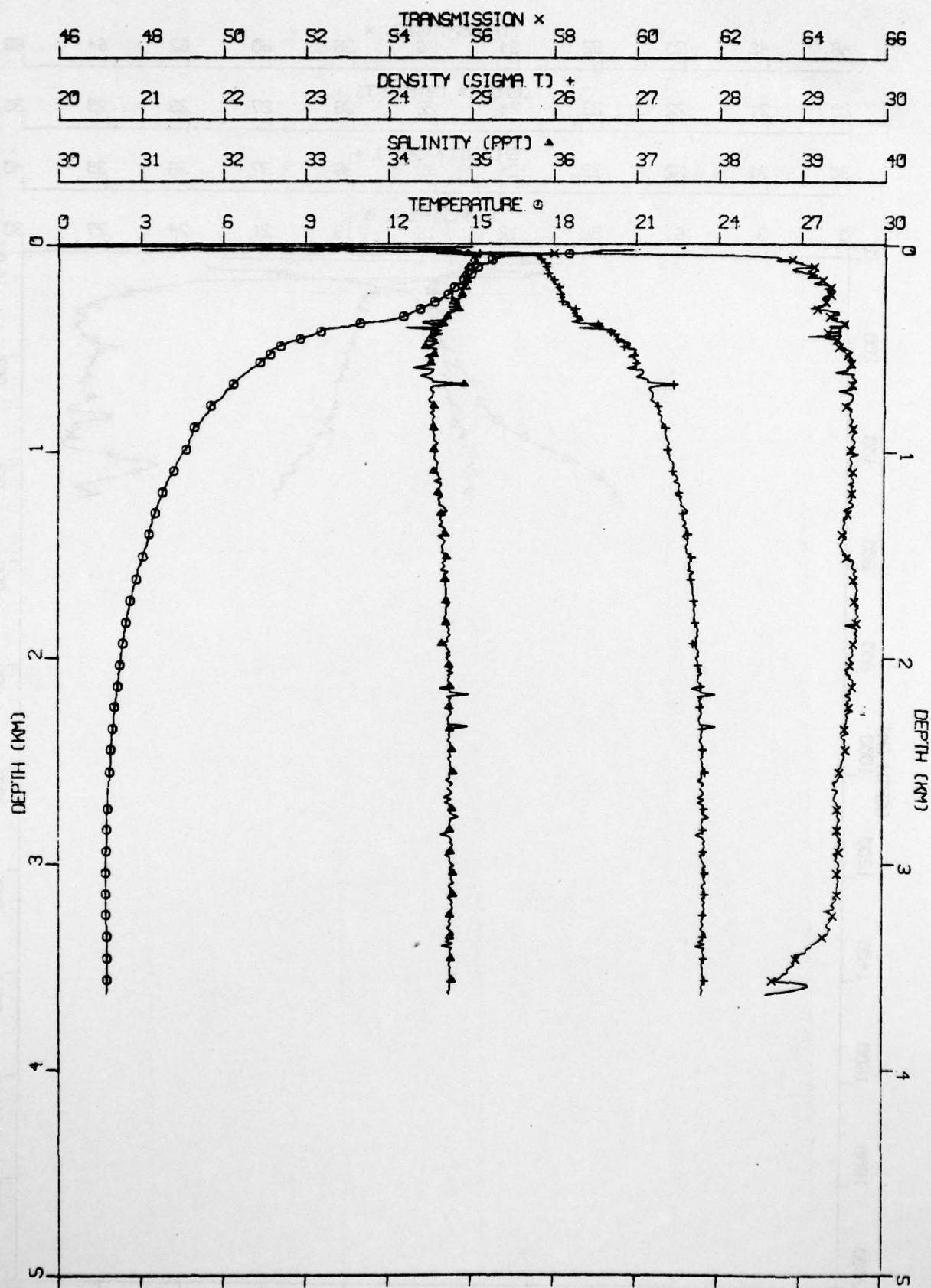


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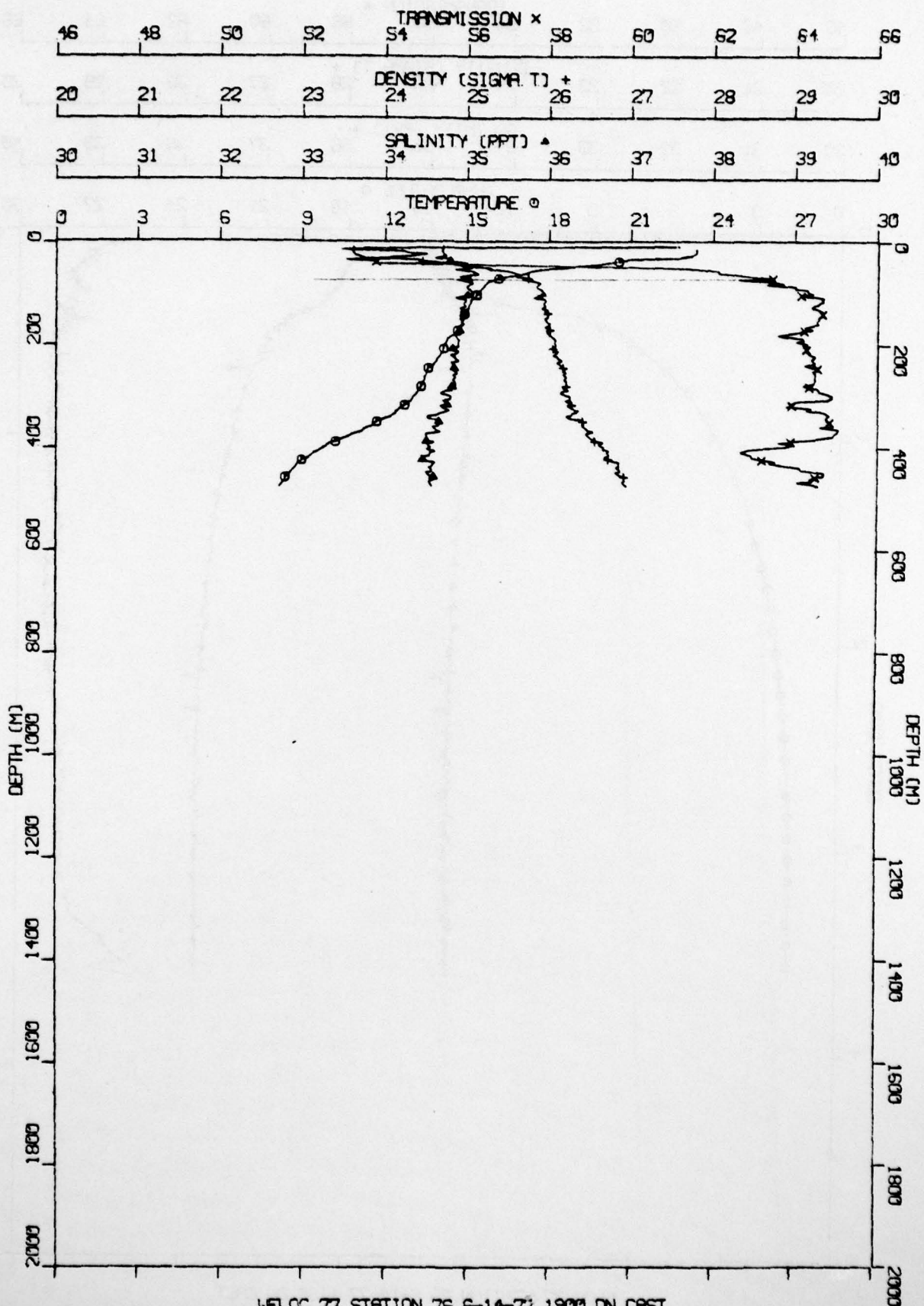




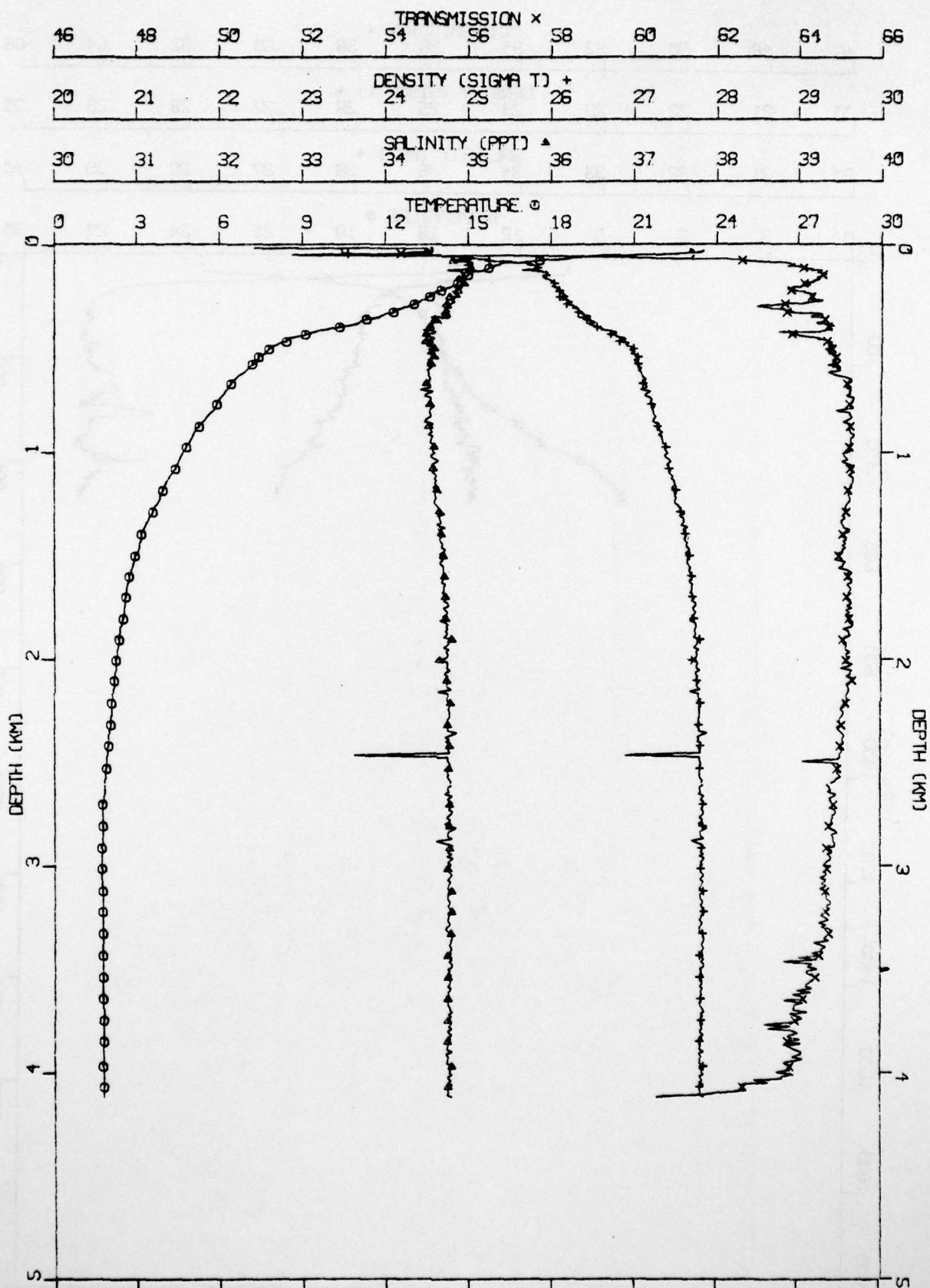


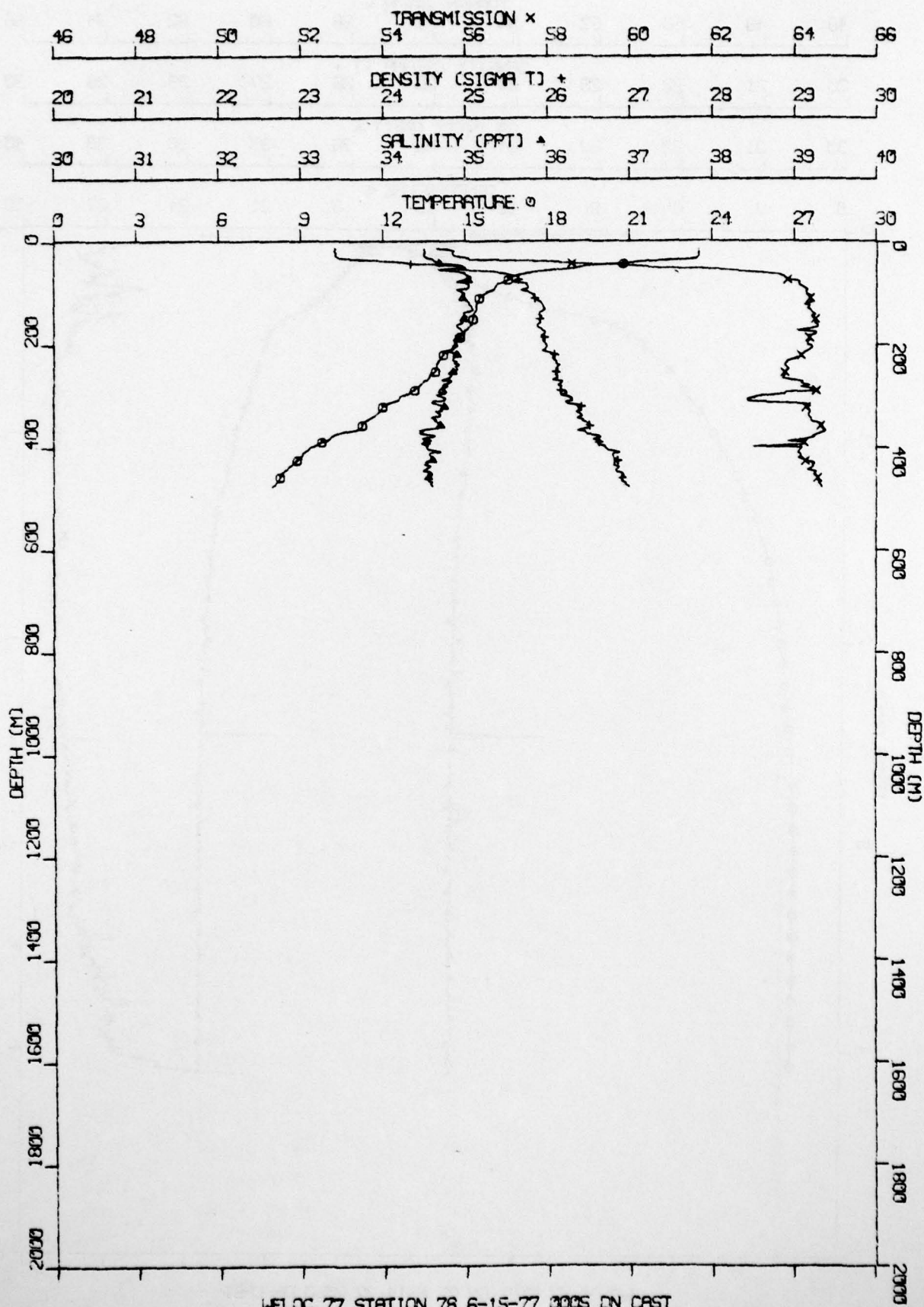


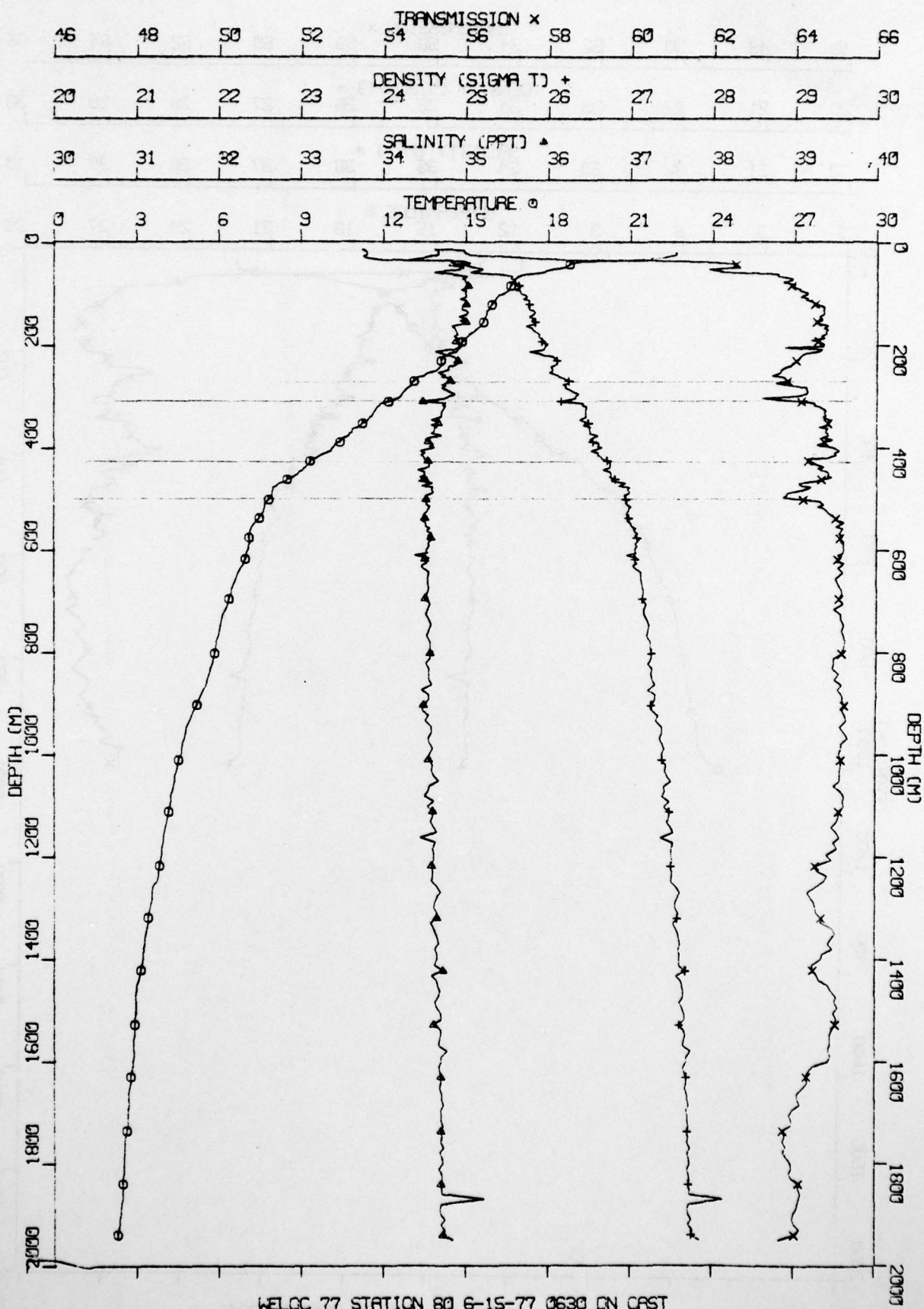
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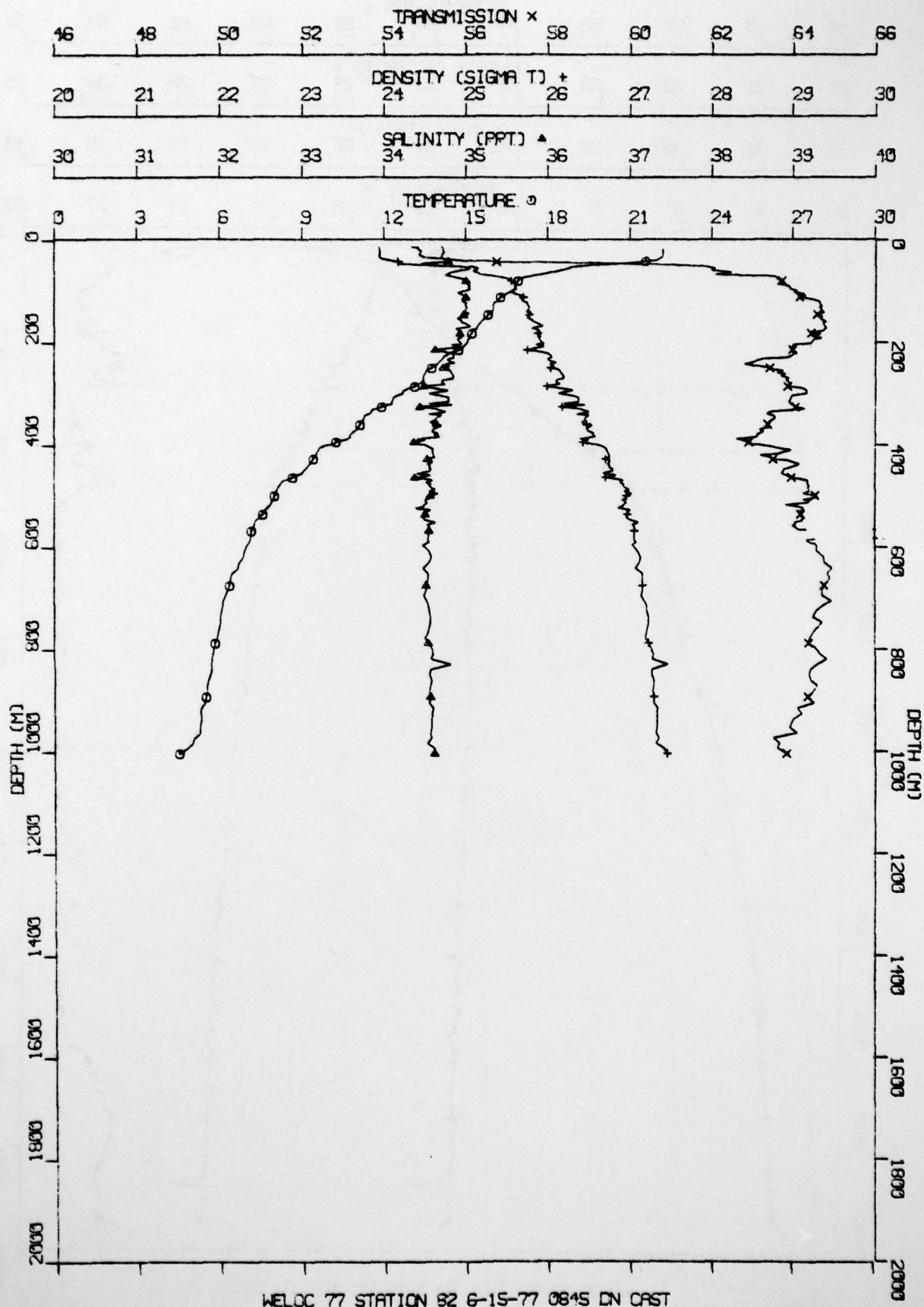












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OREGON STATE UNIV CORVALLIS SCHOOL OF OCEANOGRAPHY

F/G 8/10

OPTICAL AND HYDROGRAPHICAL OBSERVATIONS OFF THE COAST OF PERU D--ETC(U)

OCT 79 H PAK , D MENZIES , J R ZANEVELD

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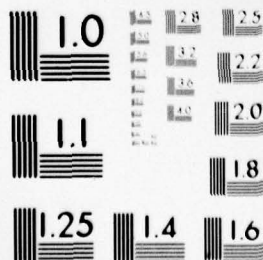
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